PB83-126748

Regulations and Non-Regulatory Revisions to State Implementation Plan: Alabama

Atlantic Environmental Associates, Inc.
Waltham, MA

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

Oct 81

U.S. Department of Commerce
National Technical Information Service
NTIS

```
BATCH:  33503M                                                    PAGE 1

B1- CONTROL NUMBER:          U322128
    OPERATORS:
01 )ACCESSION NUMBER:  ..................................PB83-126730
02C)COMMERCE CATEGORY:
03S)ADDITIONAL SRC CLIENTS:
        /        /        /
03L)LANGUAGE:
03C)COMP. ENTRY CODE:
34 )SERIAL:
35 )CORPORATE AUTHOR CODE:  073114000
    US-AUTHOR:
@04A)see individual report for order @@@
number and price[                    @@@
@05 )Atlantic Environmental Associate@@@
s, Inc., Waltham, MA.*Environmental P@@@
rotection Agency, Research Triangle P@@@
ark, NC. Office of Air Quality Planni@@@
ng and Standards.[                   @@@
@06 )Regulations and Non-Regulatory R@@@
evisions to State Implementation Plan@@@
.[                                   @@@
@11 )Oct 81,[                        @@@
@12A)57 issues[                      @@@
@13 )200/04[                         @@@
                                     @@@
                                     @@@
```

PB83 126730

Compressed Entry Only for

Title: Regulations and Non-Regulatory Revisions to State Implementation—

PB83 126748

thru

PB83 127308

EPA-450/2-81-020

Regulations and Non-Regulatory Revisions to State Implementation Plan: Alabama

By

Atlantic Environmental Associates, Inc.
59 Vernon Street
Waltham, MA 02154

Contract No. 68-02-3565

EPA Project Officer: Willis P. Beal

Prepared for

U.S ENVIRONMENTAL PROTECTION AGENCY
Control Programs Development Division
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

July 1981

i·a

TECHNICAL REPORT DATA

(Please read Instructions on the reverse before completing)

1. REPORT NO.
EPA-450/2-81-020

2.

3. RECIPIENT'S ACCESSION NO.
PB83 126748

4. TITLE AND SUBTITLE
Regulations and Non-Regulatory Revisions to State Implementation Plan: Alabama

5. REPORT DATE
October, 1981

6. PERFORMING ORGANIZATION CODE

7. AUTHOR(S)

8. PERFORMING ORGANIZATION REPORT NO.

9. PERFORMING ORGANIZATION NAME AND ADDRESS
Atlantic Environmental Associates, Inc.
59 Vernon Street
Waltham, MA 02154

10. PROGRAM ELEMENT NO.

11. CONTRACT/GRANT NO.
68-02-3565

12. SPONSORING AGENCY NAME AND ADDRESS
Control Programs Development Division
Office of Air Quality Planning and Standards
Research Triangle Park, NC 27711

13. TYPE OF REPORT AND PERIOD COVERED

14. SPONSORING AGENCY CODE

15. SUPPLEMENTARY NOTES
EPA Project Officer: Willis P. Beal

16. ABSTRACT

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA-approved State and/or local air pollution control regulations cited by reference in the Federal Register; regulations promulgated as of August 1, 1981 have been included in this document.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979. State and/or local air quality regulations which have not been Federally approved as of August 1, 1981, are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations. A summary sheet of the regulatory revisions is provided to give a quick historical assessment of the changes.

The second part of the document contains the text of non-regulatory SIP revisions approved by EPA up to August 1, 1981, excluding notices or certifications of public hearings and technical support data. A complete tabulation of these revisions is also provided. Other individual documents are also available.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Air Pollution State Regulations State Implementation Plans		

18. DISTRIBUTION STATEMENT	19. SECURITY CLASS (This Report)	21. NO. OF PAGES
Release Unlimited	Unclassified	126
	20. SECURITY CLASS (This page)	22. PRICE
	Unclassified	

EPA Form 2220-1 (Rev. 4-77) PREVIOUS EDITION IS OBSOLETE

This report has been reviewed by the Control Programs Development Division of the Office of Air Quality Planning and Standards, EPA, and approved for publication. Mention of trade names or commercial products is not intended to constitute endorsement or recommendation for use. Copies of the entire document are available for inspection and copying at EPA Headquarters (401 M Street SW, Washington, DC 20460), EPA's Office of Air Quality Planning and Standards (Room 826, 411 West Chapel Hill Street, Durham, NC 27701), and the appropriate EPA Regional Offices. Documents containing only the regulatory portions of each State Implementation Plan may be ordered for a nominal fee from the National Technical Information Services, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

PREFACE

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA approved State and/or local air pollution control regulations cited by reference in the Federal Register; all regulations Federally promulgated as of August 1, 1981 have been included.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979.* State and/or local air quality regulations which have not been Federally approved as of August 1, 1981 are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State or local agencies to enforce such regulations.

This document is not intended to provide a tool for determining the enforceability of any given regulation. Rather, it is intended to provide a comprehensive compilation of those regulations which are incorporated by reference into Title 40, Part 52, of the Code of Federal Regulations (CFR). The exclusion of a Federally approved regulation from this document does not diminish the enforceability of the regulation. Similarly, the inclusion of a given regulation in this document does not, in itself, render the regulation enforceable by either the State or EPA.

The regulations have been organized in this document according to the official State/local agency format. However, since State air quality regulations vary widely in their organization, content, and language, a standardized subject index has been added. The index listings consist of both pollutant and activity oriented categories to facilitate usage. For example, regulations which apply to copper smelters may be found under sulfur compounds (50.2), particulate matter process weight (50.1.1), or copper smelters (51.15). Federal regulations pertaining to a given State are not included herein but can be found under Title 40 Code of Federal Regulations, Part 52.

Additionally, a summary sheet of the regulatory revisions is included to provide a quick historical assessment of the changes. These summary sheets contain the date of submittal to EPA of each revision and the Federal Register publication date on which the revision was approved by EPA. A brief description of the regulation which was submitted is also included.

In accordance with the Act, the second part of the document contains non-regulatory SIP revisions approved by EPA up to August 1, 1981. All approved non-regulatory revisions listed under Identification of Plan in the CFR are included except notices or certifications of public hearings, and technical support data. Non-regulatory submittals which have only received EPA approval on selected elements are included in their entirety with an accompanying indication of the status of Federal actions on the non-approved elements. The non-regulatory revisions have been organized in this document according to the date of publication of EPA approval in the Federal Register. For historical completeness, a complete tabulation of these revisions is provided at the beginning of this second section.

---

* Regulations and Non-Regulatory Revisions to State Implementation Plan: Alabama, EPA-450/2-80-007, prepared under Contract 68-02-3388, July 31, 1980.

SUMMARY OF
EPA-APPROVED REGULATORY REVISIONS TO STATE OF ALABAMA SIP
BETWEEN JULY 1, 1979 AND JULY 31, 1981

Publication of Approval	Submittal Date	Page	Document Description
11/26/79	04/19/79	44FR67380	Revisions to Chapters 1, 4, 6, 12 and 16.
06/03/80	02/20/80	45FR37431	Revisions in permit regulations as follows: (i) Title of 16.3.2 is changed to "Permits to Construct in or near Nonattainment Areas"; (ii) a new subparagraph (9), "Significant Impact," is added to paragraph 16.3.2(b); (iii) paragraph 16.3.2(c) is revised; and (iv) subparagraph 16.3.2(d)(5) is deleted.
08/11/80	01/11/80	45FR53136	Revised emergency episode control plan, updating procedures and raising the alert level for ozone from 0.10ppm to 0.15ppm.
10/31/80	12/12/78	45FR72152	Revision to delete indirect source regulations (Chapter 10).

TABLE OF CONTENTS

STATE REGULATIONS

Revised Standard Subject Index	Section Number	Title	Page
(2.0)	Chapter 1	General Provisions	1
(2.0)	1.1	Structure and Numbering of Rules Regulations	1
(1.0)	1.2	Definitions	2
(2.0)	1.3	Organization	9
(14.0)	1.4	Availability of Records and Information	10
(2.0)	1.5	Employee Responsibilities and Conduct	11
(4.0)	1.6	Ambient Air Quality Standards	14
(9.0) (13.0)	1.7	Monitoring, Records, Reporting	15
(9.0)	1.8	Sampling and Testing Methods	15
(6.0)	1.9	Compliance Schedule	16
(7.0) (13.0)	1.10	Maintenance and Malfunctioning of Equipment; Reporting	17
(2.0)	1.11	Prohibition of Air Pollution	18
(3.0)	1.12	Permits	18
(5.0)	1.13	Variances	24
(2.0)	1.14	Circumvention	26
(2.0)	1.15	Severability	26
(2.0)	1.16	Bubble Provision	27
(8.0)	Chapter 2	Air Pollution Emergency	28
(8.0)	2.1	Air Pollution Emergency	28
(8.0)	2.2	Episode Criteria	28

TABLE OF CONTENTS (Cont.)

Revised Standard Subject Index	Section Number	Title	Page
(8.0)	2.3	Special Episode Criteria	32
(8.0)	2.4	Emission Reduction Plans	33
(8.0)	2.5	Two Contaminant Episode	33
(8.0)	2.6	General Episodes	33
(8.0)	2.7	Emission Reduction Plans for Local Episodes	34
(8.0)	2.8	Emission Reduction Plans for Other Sources	34
(8.0)	2.9	Other Authority Not Affected	35
(51.9) (51.13)	Chapter 3	Control of Open Burning and Incineration	36
(51.13)	3.1	Open Burning	36
(51.9)	3.2	Incinerators	36
(51.9	3.3	Incineration of Wood, Peanut and Cotton Ginning Wastes	37
(50.1)	Chapter 4	Control of Particulate Emissions	38
(50.1.2)	4.1	Visible Emissions	38
(50.1)	4.2	Fugitive Dust	39
(51.5)	4.3	Fuel Burning Equipment	41
(50.1.1)	4.4	Process Industries - General	43
(50.1.1)	4.5	Small Foundry Cupola	44
(51.1)	4.6	Cotton Gins	45
(51.14)	4.7	Kraft Pulp Mills	46
(51.20)	4.8	Wood Waste Boilers	47
(51.2)	4.9	Coke Ovens	47
(51.17)	4.10	Primary Aluminum Plants	52
(51.3)	4.11	Cement Plants	53

TABLE OF CONTENTS (Cont.)

Revised Standard Subject Index	Section Number	Title	Page
(50.1.1)	4.12	Grain Elevators	54
	4.13	Sintering Plants	55
(50.2)	Chapter 5	Control of Sulfur Compound Emissions	57
(51.6)	5.1	Fuel Combustion	57
(51.18)	5.2	Sulfuric Acid Plants	60
(51.15)	5.3	Petroleum Production	60
(51.21)	5.5	Process Industries - General	62
(50.4)	Chapter 6	Control of Organic Emissions	63
(51.16)	6.1	Applicability	63
(51.16)	6.2	VOC Water Separation	63
(51.16)	6.3	Loading and Storage of VOC	64
(51.16)	6.4	Fixed-Roof Petroleum Liquid Storage Vessels	65
(51.21)	6.5	Bulk Gasoline Plant	66
(50.4)	6.6	Bulk Gasoline Terminals	68
(51.16)	6.7	Gasoline Dispensing Facility - Stage I	69
(51.15)	6.8	Petroleum Refinery Sources	70
(51.16)	6.9	Pumps and Compressors	71
(51.15)	6.10	Ethylene Producing Plant	71
(51.22)	6.11	Surface Coating	71
(51.24)	6.12	Solvent Metal Cleaning	76
(51.23)	6.13	Cutback Asphalt	80
(51.21)	6.14	Petition for Alternative Controls	81
(6.0)	6.15	Compliance Schedules	82
(9.0)	6.16	Test Methods and Procedure	86

TABLE OF CONTENTS (Cont.)

Revised Standard Subject Index	Section Number	Title	Page
(50.5)	Chapter 7	Control of Carbon Monoxide Emissions	94
(50.3)	Chapter 8	Control of Nitrogen Oxides Emissions	95
(51.7)	8.1	New Combustion Sources	95
(51.10)	8.2	Nitric Acid Manufacturing	95
(10.0)	Chapter 12	Standards of Performance for New Stationary Sources	97
(2.0)	12.1	General	97
(10.0)	12.2	Designated Standards of Performance	97
(2.0)	12.3	Word or Phrase Substitutions	98
(9.0)	Chapter 14	Continuous Monitoring - Requirements for Existing Sources	100
(1.0)	14.1	Definitions	100
(9.0) (13.0)	14.2	Emission Monitoring and Reporting Requirements	100
(7.0)	14.3	Monitoring System Malfunction	102
(9.0) (13.0)	14.4	Alternate Monitoring and Reporting Requirements	102
(2.0)	14.5	Exemptions and Extensions	103
(3.0)	Chapter 16	Permits	105

REVISED STANDARD SUBJECT INDEX

- 1.0 DEFINITIONS
- 2.0 GENERAL PROVISIONS AND ADMINISTRATIVE PROCEDURES
- 3.0 REGISTRATION CERTIFICATES, OPERATING PERMITS AND APPLICATIONS
- 4.0 AIR QUALITY STANDARDS (PRIMARY AND SECONDARY)
  - 4.1 PARTICULATES
  - 4.2 SULFUR DIOXIDE
  - 4.3 NITRIC OXIDES
  - 4.4 HYDROCARBONS
  - 4.5 CARBON MONOXIDE
  - 4.6 OXIDANTS
  - 4.7 OTHERS
- 5.0 VARIANCES
- 6.0 COMPLIANCE SCHEDULES
- 7.0 EQUIPMENT MALFUNCTION AND MAINTENANCE
- 8.0 EMERGENCY EPISODES
- 9.0 AIR QUALITY SURVEILLANCE AND SOURCE TESTING
- 10.0 NEW SOURCE PERFORMANCE STANDARDS
- 11.0 NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS
- 12.0 MOTOR VEHICLE EMISSIONS AND CONTROLS
- 13.0 RECORD KEEPING AND REPORTING
- 14.0 PUBLIC AVAILABILITY OF DATA
- 15.0 LEGAL AUTHORITY AND ENFORCEMENT
- 16.0 HEARINGS, COMPLAINTS, AND INVESTIGATIONS
- 17.0 PREVENTION OF SIGNIFICANT DETERIORATION
- 18.0 AIR QUALITY MAINTENANCE AREA
- 19.0 EMISSION OFFSET POLICY
- 20.0 MAJOR STATIONARY SOURCES
- 21.0 - 49.0
  RESERVED FOR FUTURE EXPANSION OF COMMON INDEX
- 50.0 POLLUTANT - SPECIFIC REGULATIONS
  - 50.1 PARTICULATES

    50.1.1 PROCESS WEIGHT
    50.1.2 VISIBLE EMISSIONS
    50.1.3 GENERAL
  50.2 SULFUR COMPOUNDS
  50.3 NITRIC OXIDES
  50.4 VOLATILE ORGANIC COMPOUNDS
  50.5 CARBON MONOXIDE
  50.6 ODOROUS POLLUTANTS
  50.7 OTHERS (Pb, Hg, etc.)
51.0 SOURCE CATEGORY SPECIFIC REGULATIONS
  51.1 AGRICULTURAL PROCESSES (includes Grain Handling, Orchard Heaters, Rice and Soybean Facilities, Related Topics)
  51.2 COAL OPERATIONS (includes Cleaning, Preparation, Coal Refuse Disposal Areas, Coke Ovens, Charcoal Kilns, Related Topics)
  51.3 CONSTRUCTION (includes Cement Plants, Materials Handling, Topics Related to Construction Industry)
  51.4 FERROUS FOUNDRIES (includes Blast Furnaces, Related Topics)
  51.5 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - Particulates (includes Fuel Content and Other Related Topics)
  51.6 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - SO$_2$ (includes Fuel Content and Other Related Topics)
  51.7 FUEL BURNING EQUIPMENT (oil, natural gas, coal) - NO$_2$ (includes Fuel Content and Other Related Topics)
  51.8 HOT MIX ASPHALT PLANTS
  51.9 INCINERATION
  51.10 NITRIC ACID PLANTS
  51.11 NON-FERROUS SMELTERS (Zn, Cu, etc.) - Sulfur Dioxide
  51.12 NUCLEAR ENERGY FACILITIES (includes Related Topic)
  51.13 OPEN BURNING (includes Forest Management, Forest Fire, Fire Fighting Practice, Agricultural Burning and Related Topics)
  51.14 PAPER PULP; WOOD PULP AND KRAFT MILLS (includes Related Topics)
  51.15 PETROLEUM REFINERIES
  51.16 PETROLEUM STORAGE (includes Loading, Unloading, Handling and Related Topics)
  51.17 SECONDARY METAL OPERATIONS (includes Aluminum, Steel and Related Topics)
  51.18 SULFURIC ACID PLANTS

51.19 SULFURIC RECOVERY OPERATIONS
51.20 WOOD WASTE BURNERS
51.21 MISCELLANEOUS TOPICS
51.22 COATING OPERATIONS (Can, Coil, Paper, Fabric, Vinyl, Metal, Wire, Surface Coating)
51.23 CUTBACK ASPHALT
51.24 SOLVENT METAL CLEANING

CHAPTER 1

GENERAL PROVISIONS

1.1 Structure and Numbering of Rules and Regulations

1.1.1 Title and Scope

The provisions contained in these rules and regulations shall be known and may be cited as the Alabama Air Pollution Control Rules and Regulations, and shall apply to all activities and all persons in the State of Alabama, including Federal activities.

1.1.2 Chapters

The normal division of these rules and regulations are chapters, which should encompass a broad subject matter. Chapters are numbered consecutively in Arabic throughout the rules and regulations.

1.1.3 Parts

The normal division of chapters are parts. A part should be devoted to a specific subject matter within a chapter. Parts are numbered consecutively in Arabic throughout each chapter and shall include the number of the chapter set off by a decimal point. Thus, the part number for part 15 within Chapter 3 is 3.15.

1.1.4 Sections

The normal divisions of parts are sections. The section is the basic unit of these rules and regulations. Sections are numbered consecutively in Arabic throughout each part and shall include the numbers of the part set off by a decimal point. Thus, the section number for section 26 of Part 3.15 is 3.15.26.

1.1.5 Internal Division of Sections

Whenever internal divisions are necessary, sections shall be subdivided into paragraphs, paragraphs into subparagraphs, and subparagraphs into subdivisions, designated as follows:

Terminology	Illustrative symbol
Paragraph	(a)
Subparagraph	(1)
Subdivision	(i)

1.1.6 Promulgation Procedure

All requirements and provisions subject to inclusion in these rules and regulations shall be drafted as amendments to the Alabama Air Pollution Control Rules and Regulations and prepared in accordance the provisions of this part and with, insofar as it applies and does not conflict with this part, the provisions of Part 17 of Title 1 of the Code of Federal Regulations, as the same may be amended or revised.

1.1.7 Relation Back of Amendments

Whenever any provision of an amendment relates, either directly or indirectly, to an already applicable rule or regulation set forth herein, the amendment relates back to the date of initial adoption or promulgation of such rule or regulation, unless such amendment or the promulgating statement clearly evidence otherwise.

1.2 Definitions

1.2.1 Meaning of Terms

As used in these rules and regulations, terms shall have the meanings ascribed in this part.

"Act" shall mean the Alabama Air Pollution Control Act of 1971, Act No. 769, Regular Session, 1971.

"Air Contaminant" shall mean any solid, liquid, or gaseous matter, any odor, or any combination thereof from whatever source.

"Air Pollution" shall mean the presence in the outdoor atmosphere of one or more air contaminants in such quantities and duration as are, or tend to be, injurious to human health or welfare, animal or plant life, or property, or would interfere with the enjoyment of life or property throughout the State and in such territories of the State as shall be affected thereby.

"Air Pollution Emergency" shall mean a situation in which meteorological conditions and/or contaminant levels in the ambient air reach or exceed the levels which may cause imminent and substantial endangerment to health.

"Air Quality Control Region" shall mean jurisdictional areas designated at Part 81 of Title 40 of the Code of Federal Regulations.

"Capture System" means the equipment (including hoods, ducts, fans, etc.) used to contain, capture, or transport a pollutant to a control device.

"Chairman" shall mean the Chairman, or in his absence, the Vice Chairman, of the Commission.

"Coating Applicator" means an apparatus used to apply a surface coating.

"Coating Line" means one or more apparatus or operations which include a coating applicator, flash-off area, and oven wherein a surface coating is applied, dried, and/or cured.

"Commission" shall mean the "Air Pollution Control Commission of the State of Alabama" established by the Act.

"Commenced" shall mean that an owner or operator has undertaken a continuous program of construction or modification or than an owner or operator has entered into a binding agreement or contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

"Complex Source" shall mean any facility, building structure, installation or combination thereof which causes emissions to be generated through associated mobile source activity.

"Construction" shall mean fabrication, erection, or installation of an affected facility.

"Continuous Vapor Control System" means a vapor control system that treats vapors displaced from tanks during filling on a demand basis without intermediate accumulation.

"Control" shall mean any device which has the function of controlling the emissions from a process, fuel-burning, or refuse-burning device and thus reduces the creation of, or the emission of air contaminants into the atmosphere, or both.

"Control Strategy" shall mean a collection of various emission standards selected for the different categories of sources.

"Control Regulation" shall mean a legally enforceable emission control strategy.

"County Classification" shall mean the designation Class 1 County or Class 2 County. All facilities, plants or other installations shall be subject to the restrictions on air pollution emissions specific to the county classification of the county in which they are located.

(a) A "Class 2 County" shall mean a county in which:

(1) More than 50 percent of the county population resides in a non-urban place, as defined by the U. S. Department of Commerce Census Bureau for 1970.

(2) No secondary Nation Ambient Air Quality standard is being exceeded based on 1971 air quality measurements.

(b) A "Class 1 County" shall mean a county in which the conditions of either subparagraph (a)(1) or (a)(2) above or both are not met.

"Day" means a 24-hour period beginning at midnight.

"Director" shall mean the Director of the Division of Air Pollution Control of the Department of Public Health which is established by the Act.

"Effluent Water Separator" shall mean any tank, box, sump, or other container in which any volatile organic compound floating on or entrained or contained in water entering such tank, box, sump, or other container is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.

"Existing Source" shall mean any source in operation or on which construction as commenced on the date of initial adoption of an applicable rule or regulation; except that any existing source which has undergone modification after the date of initial adoption of an applicable rule or regulation, shall be reclassified and considered a new source.

"Emission" shall mean a release into the outdoor atmosphere of air contaminants.

"Employee" shall mean any employee of the Commission or Division.

"Federal Act" shall mean the Clean Air Act (42 U.S.C. 1857 et seq.) as last amended, and as may hereafter be amended.

"Flash-off area" means the space between the application area and the oven.

"Fuel-Burning Equipment" shall mean any equipment, device, or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimney, used primarily, but not exclusively, to burn any fuel for the purpose of indirect heating in which the material being heated is not contacted by and adds no substance to the products of combustion.

"Fugitive Dust" shall mean solid air-borne particulate matter emitted from any source other than a flue or stack.

"Gasoline" means a petroleum distillate having a Reid vapor pressure of 27.6 KPA (4 psia) or greater and used as a fuel for internal combustion engines.

"Heat Available" shall mean the aggregate heat content of all fuels whose products of combustion pass through a stack or stacks.

"Hydrocarbon" means any organic compound of carbon and hydrogen only.

"Incinerator" shall mean any equipment, device or contrivance and all appurtenances thereof used for the destruction by burning of solid, semi-solid, liquid, or gaseous combustible wastes.

"Intermediate Vapor Control System" means a vapor control system that employs an intermediate vapor holder to accumulate vapors displaced from tanks during filling. The control device treats the accumulated vapors only during automatically controlled cycles.

"Loading Rack" means an aggregation or combination of gasoline loading equipment arranged so that all loading outlets in the combination can be connected to a tank truck or trailer parked in a specified loading space.

"Model Year" shall mean the annual production period of new motor vehicles designated by the calendar year in which such period ends, provided that if the manufacturer does not so designate vehicles manufactured by him, the model year with respect to such vehicles shall mean the twelve month period beginning January 1 of the year specified herein.

"Modification" shall mean any physical change in, or change in the method of operation of, an affected source which increases the amount of any air contaminant (to which a rule or regulation applies) emitted by such source or which results in the emission of any air contaminant (to which a rule or regulation applies not previously emitted, except that:

(a) Routine maintenance, repair, and replacement shall not be considered physical changes, and

(b) The following shall not be considered a change in the method of operation:

    (1) An increase in the production rate;

    (2) An increase in hours of operation;

    (3) Use of an alternative fuel or raw material

"Motor Vehicle" shall mean every self-propelled device in or upon or by which, any person or property is, or may be, transported or drawn upon a public highway.

"New Source" shall mean any source built or installed on or after the date of initial adoption of an applicable rule or regulation and any source existing at said stated time which later undergoes modification. Any source moved to another premise involving a change of location after the date of initial adoption of an applicable rule or regulation shall be considered a new source.

"Odor" shall mean smells or aromas which are unpleasant to persons, or which tend to lessen human food and water intake, interfere with sleep, upset appetite, produce irritation of the upper respiratory tract, or cause symptoms of nausea, or which by their inherent chemical or physical nature, or method of processing, are, or may be, detrimental or dangerous to health. Odor and smell are used interchangeably herein.

"Opacity" shall mean the obscuration of an observer's view produced by smoke of any color that is equivalent to an obscuration by smoke of a shade specified in the Ringelmann Smoke Chart published by the United States Bureau of Mines.

"Open Burning" shall mean the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through an adequate stack, duct, or chimney.

"Operating Time" shall mean the number of hours per year that a source conducts operations.

"Organic Material" means a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

"Oven" means a chamber within which heat is used to bake, cure, polymerize, and/or dry a surface coating.

"Owner or operator" shall mean any person who owns, leases, operates, controls, or supervises an affected facility, article, machine, equipment, other contrivance, or source.

"Particulate Matter" shall mean finely divided material, except uncombined water which is a liquid or a solid at standard conditions of temperature at 70°F and pressure at 14.7 pounds per square inch absolute.

"Prime Coat" means the first film of coating applied in a multiple coat operation.

"Priority Classification" shall mean Air Quality Control Region Pollution Priority Classifications set forth at Part 52 of Title 40 of the Code of Federal Regulations.

"Process" shall mean any action, operation, or treatment of materials, including handling and storage thereof, which may cause discharge of an air contaminant, or contaminants, into the atmosphere, but excluding fuel burning and refuse burning.

"Process Weight" shall mean the total weight in pounds of all materials introduced into any specific process which may cause any discharge into the atmosphere.

"Process Weight Per Hour" shall mean the total weight of all materials introduced into any specific process that may cause any discharge of particulate matter. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. For a cyclical or batch operation, the process weight per hour will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour will be derived by dividing the process weight for a typical period of time by that time period.

"Refuse" shall mean matter consisting of garbage, rubbish, ashes, street debris, dead animals, abandoned vehicles, industrial wastes, demolition wastes, construction wastes, special wastes, or sewage treatment residue.

"Reid vapor pressure" means a vapor pressure specification for volatile crude oil and volatile nonviscous petroleum liquids except liquid petroleum gases as determined by American Society for Testing and Materials. The pressure approximates the absolute vapor pressure of the liquid.

"Ringelmann Chart" shall mean the chart published and described in U.S. Bureau of Mines Information Circular 8333.

"Shutdown" means the cessation of operation of affected source or emission control equipment.

"Smoke" shall mean gas-borne particles resulting from incomplete combustion, consisting predominantly, but not exclusively, of carbon, ashes, or other combustible material.

"Soiling Index" shall mean a measure of the soiling properties of suspended particles in air determined by drawing a measured volume of air through a known area of Whatman No. 4 filter paper for a measured period of time, expressed as COHs/1,000 linear feet.

"Solid Particulate Matter" as used in 4.10.2 shall mean particulate matter which is not benzene soluble.

"Solvent" means organic materials which are liquid at standard conditions and which are used as dissolver, viscosity reducers, or cleaning agents.

"Source" shall mean any building, structure, facility, installation, article, machine, equipment, device, or other contrivance which emits or may emit any air contaminant. Any activity which utilizes abrasives or chemicals for cleaning or any other purpose (such as cleaning the exterior of buildings) which emits air contaminants shall be considered a source.

"Stack or ducts" shall mean any flue duct, or other contrivance arranged to conduct emissions to the open air.

"Standard Conditions" means a temperature of 20^{o}C (68^{o}F) and pressure of 760 millimeters of mercury (29.92 inches of mercury).

"Startup" shall mean the setting in operation of an affected source for any purpose.

"State" shall mean the State of Alabama.

"Submerged Fill Pipe" shall mean any fill pipe, the discharge opening of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean any fill pipe, the discharge opening of which is entirely submerged when the liquid level is two times the fill pipe diameter, in inches, above the bottom of the tank.

"Topcoat" means the final film of coating applied in a multiple coat operation.

"Total Reduced Sulfur (TRS)" shall mean hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide and any other organic sulfides present.

"True Vapor Pressure" means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2597, "Evaporation Loss from Floating Roof Tanks", 1962.

"Uncombined Water" shall mean any water droplets or water vapor condensate that does not contain any other solid or liquid particulate matter attached to water droplets.

"Vapor Collection System" means a vapor transport system which uses direct displacement by the liquid loaded to force vapors from the tank into a vapor control system.

"Vapor Recovery System" means a system that prevents release to the atmosphere of at least 90 percent by weight of organic compounds in the vapor displaced from a tank during the transfer of gasoline.

"Volatile Organic Compounds" (also denoted as VOC) means any organic compound excluding methane, ethane, 1,1,1, trichlorethane (methyl choloform) and trichlorotrifluoroethene with a true vapor pressure of 1.5 psia under storage conditions. The procedures specified in the regulation supersede this definition.

ethane

1.3 Organization

1.3.1 Administration of Division

The Division of Air Pollution Control created by Section 4(a) of the Act shall be a division of the Bureau of Environmental Health of the Alabama Department of Public Health and shall be administered according to the direction of the State Health Officer.

1.3.2 Appointment of the Director

The Director of the Division shall be appointed by the Commission in accordance with the Merit System laws of this State. The Director shall, at the time of his appointment, meet the qualifications and requirements of a Public Health Engineer classification as established by the State Personnel Board, and this shall have been certified by the State Personnel Director. The Director shall be compensated pursuant to a compensation plan approved by the State Personnel Board.

1.3.3 Organization of the Division

The Director shall divide the Division into appropriate organizational units for the purpose of distributing duties, responsibilities, and work among the various personnel of the Division. Within limits of rules and regulations of the State Personnel Board, the Director may appoint the heads of the organizational units so created. The creation of organizational units and the appointment of unit heads shall be reported to the Commision and shall be subject to its approval.

1.3.4 Division Personnel

Subject to the State Merit System laws and the limitations of budget, the Director may employ, in the name of the Commission, such technical, administrative and clerical, and other personnel as he deems necessary to carry out the purposes and provisions of the Act. Personnel actions taken by the Director shall be reported to the Commission from time to time.

1.4 Availability of Records and Information

1.4.1 Public Inspection of Records

Except as is provided in this part, any records, reports or information obtained under the Act, and the official records of the Commission shall be available to the public for inspection. Requests for permission to inspect such records should be made to the Director, Alabama Air Pollution Control Commission, Montgomery, Alabama 36104, unless otherwise directed in published organizational, procedural, or regulatory statements pertaining to specific records or classes of records. Such request should state the general subject matter of the records sought to be inspected to permit identification and location.

1.4.2 Exceptions

Upon a showing satisfactory to the Director by any person that records, reports, or information, or particular part thereof, (other than emission data) to which the Commission has access if made public, would divulge production or sales figures or methods, processes or production unique to such person, or would otherwise tend to affect adversely the competitive position of such person by revealing trade secrets, the Commission and the Director shall consider such record, report, or information or particular portion thereof confidential in the administration of the Act.

1.4.3 Creation of Record

Records will not be created by compiling selected items from other documents at the request of a member of the public, nor will records be created to provide the requester with data such as ratios, proportions, percentages, frequency distribution, trends, correlations, or comparisons.

1.4.4 Denial of Requests for, or Non-existence of, Information

If it is determined pursuant to this Part that requested information will not be provided or that, to the best knowledge of the Director, requested information does not exist, the Director shall notify in writing the party requesting the information that the request is either denied or cannot be fulfilled.

1.4.5 Copies of Documents

If it is determined that information requested may be disclosed, the requesting party shall be afforded the opportunity to obtain copies of the documents containing such information. However, records shall not be released for copying by non-Division personnel except by permission of the Director. When a determination not to disclose a portion of information requested has been made, records shall be masked for copying of nonexcepted portions of the information.

1.4.6 Disclosure of Information to Other Agencies

Nothing in these rules and regulations shall be construed to prevent disclosure of any report, record or information obtained under the Act, or any of the official records of the Commission to Federal, State, or local air pollution control agencies, or when relevant in any proceedings under the Act.

1.4.7 Correlation of Information

As soon as practicable, the Director shall provide for public availability of emission data reported by source owners or operators or otherwise obtained by the Director of the Division. Such emission data shall be correlated with applicable emission limitations or other measures. As used in this section, "correlated" means presented in such a manner as to show the relationship between measured or estimated amounts of emissions and the amounts of such emissions allowable under these rules and regulations.

1.5 Employee Responsibilities and Conduct

1.5.1 Introduction

People who work for the Alabama Air Pollution Control Commission are in a special category. They are not only employed by the Commission, which may be their immediate "boss", but more importantly, they are paid by the people of Alabama. Consequently, they have an obligation not only to their immediate supervisors, but also to the taxpayer to assure that he gets his "money's worth". As a result, Commission employees live in somewhat of a glass house and must adhere to high moral and ethical standards in their business relationships and personal conduct.

It is virtually impossible to set out specific "rules" to govern each employee's conduct in all phases of his job. This is not the intent of these guidelines. Rather, it is an attempt to present some of the more frequent or common situations which arise and to provide each employee with general guidelines to assist him in carrying out his duties in an efficient and responsible manner without the need for specific identification of everything he can or cannot do.

1.5.2 General Comments

Commission employees are expected to comply with all statutes and rules of the State and their communities. It is not the intent of the Commission as an employer to be concerned with the non-working time of its employees. However, when off-duty conduct has a bearing on the Commission operations or brings discredit upon the Commission or State government, then such conduct does legitimately become a concern and could result in appropriate disciplinary action against the employee.

The Commission employee must be especially careful to avoid such things as using his official position for personal gain, giving unjustified preferences, losing sight of the need for efficient and impartial decisions in methods of operation, or committing an act which could result in questioning the integrity of the Division or Commission.

1.5.3 Gifts and Favors

Commission employees ought to be especially careful in their relationships to avoid any taint of irresponsibility by accepting any gift or gratuity from a non-employee who is now or is seeking to do business with the Commission or whose business is regulated by the Commission. Many times an employee will be offered items of nominal value such as pens, pencils, calendars, matches, etc. It would not be improper to accept these items as long as both parties recognize that there is no intent to affect a business relationship. Likewise, there will be times when non-employees will offer to take a Commission employee to lunch to discuss business. This, too, can be proper or improper depending on the circumstances. If done on an infrequent basis and in the ordinary course of business, it would appear to be proper. However, if the intent of either party was to allow the social affair to affect the business transaction, it most definitely would be improper. Each employee must be conscious of the possibility of impropriety and make his own decision as to the particular situation.

1.5.4 Outside Employment

Each full-time Commission employee is expected to devote his entire working hours to his job and to the business of the Commission. While there is no absolute bar to outside employment, such employment must not interfere with complete attention to the employee's responsibilities as a Commission employee. There are, of course, some outside employment situations which could result in a conflict of interest between the two jobs. These kinds of involvements between outside activities and

Commission employment must be strictly avoided. If the employee has any question that a conflict of interest situation might develop, he should immediately discuss the situation with the Director.

Naturally, an employee should not receive any compensation from any outside source for the performance of his Commission responsibilities.

Employees are, of course, encouraged to participate in civic organization activities, again where such activities do not interfere with full performance of the employee's Commission responsibilities.

1.5.5 Use of Privileged Information

Many Commission employees will deal with plans and programs of significant public interest. Employees must not use this privileged information to their own financial advantage or to provide friends and acquaintances with financial advantages, or with information which could be used for financial advantage.

If an employee finds that he has an outside financial interest which could be affected by Commission plans or activities, he should immediately report the situation to the Director.

Each employee is charged with the responsibility of insuring that he releases only information that should be made available to the general public.

1.5.6 Use of State Property

Employees should not, directly or indirectly, use or allow the use of Commission or State property of any kind for other than official activities.

1.5.7 Conclusion

The foregoing guidelines should assist each employee in more efficiently carrying out his responsibilities as a Commission employee. As mentioned earlier, these standards are not intended to be all-encompassing, nor to spell out each kind of situation that will arise. Likewise, it has not been spelled out in detail all of those actions such as theft of State property, being intoxicated on the job, etc., which is recognized as subjecting a person to disciplinary action.

It is well recognized that many problems will arise in the daily course of an employee's activities which could raise some question in his mind as to what action he should take. Each employee is encouraged to discuss these matters with the Director to obtain guidance and assistance.

1.6 Ambient Air Quality Standards

1.6.1 Primary and Secondary Standards

The National primary ambient air quality standards and national secondary ambient air quality standards and accompanying appendices of reference methods, set forth as Part 50 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised, are hereby incorporated and made a part of these regulations, and shall apply throughout the State.

1.6.2 Policy

It is the objective of the Commission to obtain and maintain the ambient air quality standards of this Part in achieving the policy and purpose of the Act and as required by the Federal Act. The adoption hereby of the national primary and secondary ambient air quality standards shall not be considered in any manner to allow significant deterioration of existing air quality in any portion of the State.

1.6.3 Attainment of Primary Standard

These rules and regulations and the administration of the Division by the Director shall provide for the attainment of the national primary ambient air quality throughout the State as expeditiously as practicable, but in no case later than three years after the date of initial adoption of these rules and regulations or within the time limits specified by Section 110(a) of the Clean Air Act, as amended (84 Stat. 1680), whichever is later.

1.6.4 Attainment of Secondary Standard

To the extent practicable and feasible, these rules and regulations and the administration of the Division by the Director shall strive for the attainment of the national secondary ambient air quality throughout the State concurrently with the attainment of the national primary ambient air quality standard as provided in Section 1.6.3.

1.6.5 Affect on Interstate Air Quality Control Regions

The administration of the Division by the Director shall insure that air contaminants emitted within an Alabama portion of an Interstate Air Quality Control Region designate at Part 81 of Title 40 of the Code of Federal Regulations will not interfere with attainment and maintenance of any national primary or secondary ambient air quality standard in the remaining portion of such region. To this end, the Director is authorized to advise and consult with air pollution control agencies to achieve the purposes of this section.

1.7 Monitoring, Records, Reporting

1.7.1 The Director may require the owner or operator of any air contaminant source to establish and maintain such records; make such reports; install, use and maintain such monitoring equipment or methods; sample such emissions in accordance with such methods, at such locations, intervals and procedures as the Director may prescribe; and provide such periodic emission reports as required in Section 1.7.2.

1.7.2 Reports

Records and reports as the Director may prescribe on air contaminants or fuel shall be recorded, compiled and submitted on forms furnished by the Director or when forms are not so furnished, then in formats approved by the Director.

(a) Emissions of particulate matter, sulfur dioxide, and oxides of nitrogen shall be expressed as follows: in pounds per hour and pounds per million B.T.U. of heat input for fuel-burning equipment; in pounds per hour and pounds per 100 pounds of refuse burned for incinerators; and in pounds per hour and in pounds per hourly process weight or production rate or in terms of some other easily measured and meaningful process unit specified by the Director.

(b) Sulfur dioxide and oxides of nitrogen emission data shall be averaged over a 24-hour period and shall be summarized monthly. Daily averaged and monthly summaries shall be submitted to the Director biannually. Data should be calculated daily and available for inspection at any time.

(c) Particulate matter emissions shall be sampled and submitted biannually.

(d) Visible emissions shall be measured continuously and records kept indicating total minutes per day in which stack discharge effluent exceeds 20 percent opacity. Data should be summarized monthly and submitted monthly and submitted biannually. Current daily results shall be available for inspection at any time.

(e) The sulfur content of fuels, as burned, except natural gas, shall be determined in accordance with current recognized ASTM procedures. Averages for periods prescribed by the Director shall be submitted biannually. Records shall be kept current and be available for inspection.

1.8 Sampling and Testing Methods

1.8.1 Methods

All required sampling and testing shall be made and the results calculated in accordance with sampling and testing procedures and methods approved by the Director. All required samples and tests shall be made under the direction of persons qualified by training and/or experience in the field of air pollution control.

1.8.2 Standard Methods

The Director, to the extent practicable, should recognize and approve the test methods and procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

1.8.3 The Division may conduct tests and take samples of air contaminants, fuel, process material or other material which affects or may affect emission of air contaminants from any source. Upon request of the Division, the person responsible for the source to be tested shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants. If an authorized employee of the Division during the course of an inspection obtains a sample of air contaminant, fuel, process material, or other material, he shall give the owner or operator of the equipment or fuel facility a receipt for the sample obtained.

1.8.4 Report to Owner or Operator

At the conclusion of any inspection under Section 9 of the Act, or conduction of any testing or sampling under this Part, if requested, the owner or operator of the premises shall receive a report setting forth all facts found which relate to compliance status with the Act and these rules and regulations.

1.9 Compliance Schedule

1.9.1 Scope

Except as otherwise specified, compliance with the provisions of these rules and regulations shall be according to the time schedule of this Part.

1.9.2 New Sources

All new sources shall comply with the applicable rules and regulations of Chapter 3 et seq. within 60 days after achieving the maximum production rate at which the affected source will be operated, but not later than 120 days after initial startup of such source, unless the Director specifies another period of time as a condition to the issuance of any Permit under Part 1.12.

1.9.3 Existing Sources

All existing sources not in compliance as of the date of initial adoption of an applicable rule or regulation contained in Chapter 3 et seq. shall be in compliance within 6 months of such initial date unless the owner or operator responsible for the operation of such source shall have submitted to the Director in a form and manner satisfactory to him, a control plan and schedule for achieving compliance, such plan and schedule to contain a date on or before which full compliance will be attained, and such other information as the Director may require. Any such plan and schedule expected to extend over a period of 18 or more months from such initial date shall include provisions for periodic increments of progress toward full compliance. If approved by the Director, such dates shall be the dates on which such owner or operator shall achieve incremental progress and full compliance. The Director may require persons to submit subsequent periodic reports on progress in achieving compliance. In no event shall the control plan and schedule exceed 3 years from the date of initial adoption of an applicable rule or regulation. The provisions of this Section shall not apply to sources for which permits are required under Part 1.12.

1.9.4 Nothing in this Part shall relieve any person, or any new or existing source from complying with the provisions of Chapters 1 and 2 of these rules and regulations.

1.10 Maintenance and Malfunctioning of Equipment; Reporting

1.10.1 Maintenance; Reporting

In the case of shutdown of air pollution control equipment (which operates pursuant to any permit issued by the Director) for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Director at least twenty-four (24) hours prior to the planned shutdown, unless such shutdown is accompanied by the shutdown of the source which such equipment is intended to control. Such prior notice shall include, but is not limited to the following:

(a) Identification of the specific facility to be taken out of service as well as its location and permit number.

(b) The expected length of time that the air pollution control equipment will be out of service.

(c) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period.

(d) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period.

(e) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.

1.10.2 Malfunction; Reporting

In the event that any emission source, air pollution-control equipment, or related facility fails or breaks down in such manner as to cause the emission of air contaminants in violation of these rules and regulations, the person responsible for such source, equipment, or facility shall notify the Director within 24 hours of such failure or breakdown and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Director shall be notified when the condition causing the failure or breakdown has been corrected and such source, equipment, or facility is again in operation.

1.11 Prohibition of Air Pollution

No person shall permit or cause air pollution, as defined in Section 1.2.1 of this Chapter by the discharge of any air contaminant for which no ambient air quality standards have been set under Section 1.6.1.

1.12 Permits

1.12.1 Permits Required

(a) Permit to Construct - Any person building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause the issuance of or an increase in the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, shall first obtain authorization for such construction from the Director in the form of a Permit to Construct. A Permit to Construct shall remain in effect until the permit to operate the equipment for which the application was filed is granted or denied or the application is canceled.

(b) Permit to Operate

(1) Before any article, machine, equipment or other contrivance described in paragraph (a) may be operated or used, a written permit shall be obtained from the Director. No permit to operate shall be granted for any article, machine, equipment or contrivance described in paragraph (a), constructed or installed without authorization as required by paragraph (a), until the information required is presented to the Director and such article, machine, equipment or contrivance is altered, if necessary, and made to conform to the standards established by the

Commission.

(2) Any article, machine, equipment or other contrivance described in paragraph (a) which is presently operating (or which is not presently operating but which is capable of being operated) without a Permit to Operate, may continue to operate (or may restart) only if its owner or operator obtains a Permit to Operate prior to a date to be set by the Director (or prior to restarting).

(3) The Director shall have the authority to decide cases where an article, machine, equipment, or other contrivance is not clearly subject to nor exempt from the application of this Part. In addition, the Director may rule that a particular article, machine, equipment or other contrivance is subject to the application of this Part even though it is exempt from the system according to Sections 1.12.1 and 1.12.2 of this Part. The operator or builder of such an article, a machine, equipment or other contrivance may appeal the the Director's classification to the Commission, which shall overrule the Director only if it is shown that he acted arbitrarily and contrary to the purposes of the Act.

(c) Display of Permit to Operate - A person who has been granted a Permit to Operate any article, machine, equipment, or other contrivance shall keep such Permit under file or on display at all times at the site where the article, machine, equipment, or other contrivance is located and will make such a permit readily available for inspection by any and all persons who may request to see it.

1.12.2 Exemptions

From time to time the Director may specify certain classes or sizes or articles, machines, equipment, or other contrivances which would normally be subject to the requirement to obtain Permits to Operate or Construct, as being exempt from the requirement to obtain such permits. Exempt sources are subject in every other way to these rules and regulations.

1.12.3 Transfer

A Permit to Construct or Operate shall not be transferable whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another.

1.12.4 Applications

Every application for a Permit to Construct or Operate required under Section 1.12.1 shall be filed in the manner and form prescribed by the Director and shall give all the information necessary to enable the Director to make the determination required by Section 1.12.8.

1.12.5 Cancellation of Applications

A Permit to Construct shall expire and the application shall be canceled two years from the date of issuance of the Permit to Construct if the construction has not begun.

1.12.6 Action on Application

The Director shall act, within a reasonable time, on an application for Permit to Construct, Permit to Operate and shall notify the applicant in writing of its approval, conditional approval or denial.

1.12.7 Provision of Sampling and Testing Facilities

A person operating or using any article, machine, equipment or other contrivance for which these rules and regulations require a permit shall provide and maintain such sampling and testing facilities as specified in the Permit to Construct or Permit to Operate.

1.12.8 Standards for Granting Permits

(a) The Director shall deny a permit except as provided by Section 1.12.9, if the applicant does not show that every article, machine, equipment or other contrivance, the use of which may cause the issuance of air contaminants, is so designed, controlled, or equipped with such air pollution control equipment, that it may be expected to operate without emitting or without causing to be emitted air contaminants in violation of these rules and regulations.

(b) The Director shall deny a permit if the applicant does not present, in writing, a plan whereby the emission of air contaminants by every article, machine, equipment, or other contrivance described in the permit application, will be reduced during periods of an Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency in accordance with the provisions of Chapter 2.

(c) Before a Permit to Construct or Permit to Operate is granted, the Director may require the applicant to provide and maintain such facilities as are necessary for sampling and testing purposes in order to secure information that will disclose the nature, extent, quantity or degree of air contaminants discharged into the atmosphere from the article, machine, equipment or other contrivance described in the Permit to Construct or Permit to Operate. In the event of such a requirement, the Director shall notify the applicant in writing of the required size, number and location of the sampling platform; the access to the sampling platform; and the utilities for operating the sampling and testing equipment.

(d) The Director may also require the applicant to install, use and maintain such monitoring equipment or methods; sample such emissions in accordance with such methods, at such locations, intervals and procedures as may be specified; and provide such information as the Director may require.

(e) Before acting on an application for Permit to Construct or Permit to Operate, the Director may require the applicant to furnish further information or further plans or specifications.

(f) In acting upon a Permit to Operate, if the Director finds that the article, machine, equipment or other contrivance has been constructed not in accordance with the Permit to Construct and if the changes noted are of a substantial nature in that the amount of air contaminants emitted by the article, machine, equipment or other contrivance may be increased, or in that the effect is unknown, then he shall deny the Permit to Operate. The Director shall not accept any further application for a Permit to Operate until the article, machine, equipment or other contrivance has been reconstructed in accordance with the Permit to Construct, or until the applicant has proven to the satisfaction of the Director that the change will not cause an increase in the emission of air contaminants.

(g) The Director shall deny a Permit to Construct where he determines that the construction and operation of such source will interfere with attaining or maintaining any primary or secondary standard established by Section 1.6.1 or will allow significant deterioration of existing air quality.

(h) In granting any Permit to Operate, the Director may allow, as a condition of such permit, for the intermittent discharge of air contaminants,during startup, shut down, rate change or load change, in excess of the limitations specified in these rules and regulations where he finds that because of the nature of the source there is no practicable alternative.

1.12.9 Conditional Permit

(a) The Director may issue a Permit to Construct or a Permit to Operate subject to conditions which will bring the operation of any article, machine, equipment or other contrivance within the standards of Section 1.12.8, in which case the conditions shall be specified in writing. Commencing work under such a Permit to Construct or a Permit to Operate shall be deemed acceptance of all the conditions specified. The Director shall issue a Permit to Construct or a Permit to Operate with revised conditions upon receipt of a new application, if the applicant demonstrates that the article, machine, equipment or other contrivance can operate within the standards of Section 1.12.8 under the revised conditions.

(b) A Conditional Permit may allow an article, machine, equipment or other contrivance to be operated in violation of the conditions of Section 1.12.8 if one of the conditions of the permit is a definite schedule by which the article, machine, equipment, or contrivance may attain the conditions of Section 1.12.8 and be granted a Permit to Operate, and if the schedule provides for attaining the conditions of Section 1.12.8 at the earliest possible date and is approved by the Director. A Conditional Permit will be revoked if the applicant does not submit progress reports to the Director according to the schedule established by the Conditional Permit. The Director may further revoke the Conditional Permit if the progress reports do not show satisfactory progress as specified by the terms of the Conditional Permit or if the progress reports are found to be inaccurate.

(c) A Conditional permit that allows any new article, machine, equipment or contrivance to operate in violation of the requirements of Section 1.12.8 may not be granted for a period of time greater than one year, including all renewals.

(d) No Conditional Permit issued under this Section for any existing article, machine, equipment or contrivance may be granted for a period of time longer than the greater of the following periods:

(1) The period from the granting of the permit to a date three years after the date of initial adoption of an applicable rule or regulation.

(2) The period from the granting of the permit to a date three years after the date the Administrator of the U. S. Environmental Protection Agency approves, in accordance with Section 110 of the Federal Act, such applicable rule or regulation as a part of an implementation plan (or any revision thereof).

1.12.10 Temporary Permit to Operate

Upon application for a Permit to Operate by a new facility, the Director shall, within a reasonable period of time, dispatch an inspector to the facility in question. If the inspector determines that the facility has been constructed according to the specifications as set forth under the Permit to Construct, or else that any changes to the facility would reduce or effect to an unsubstantial degree that quantity of air contaminants emitted by the facility, and if a reviewing officer of the Division agrees with this conclusion, then the Director shall issue a temporary Permit to Operate which will remain in force until an official inspection of the facility under actual operating conditions can be made and the results reviewed or until the Temporary Permit is suspended or revoked by the Director. The Director may issue a Temporary Permit to Operate without an inspection if the applicant fulfills the following requirements:

(a) The application for a Permit to Construct is filled out and countersigned by a Professional Engineer familiar with air pollution control as it relates to the equipment under application.

(b) Upon completion of the construction, a Professional Engineer familiar with the Permit to Construct submits a letter to the Director, signed and sealed with his professional stamp, testifying that the construction under application has been completed and is in accordance with the specification as set down in the Permit to Construct. The Director, is empowered to reject the testimony of the Professional Engineer if the Director decides that the Professional Engineer's qualifications are insufficient to allow him to accurately and completely assess the equipment in question. A Professional Engineer may appeal any such judgement to the Commission.

1.12.11 Denial of Application

In the event of denial of a Permit to Construct or Permit to Operate, the Director shall notify the applicant in writing of the reason therefor. Service of this notification may be made in person or by mail, and such service may be proved by the written acknowledgement of the persons served or affidavit of the person making the service. The Director shall not accept a further application unless the applicant has complied with the objections specified by the Director as its reasons for denial of the Permit to Construct or the Permit to Operate.

1.12.12 Appeals

Within 10 days after notice by the Director of denial or conditional approval of a Permit to Construct or Permit to Operate, the applicant may petition the Commission, in writing, for a review. The Commission may sustain or reverse the action of the Director; such order may be made subject to specified conditions.

1.12.13 The holder of a Permit under this Part shall comply with conditions contained in such Permit as well as all applicable provisions of these rules and regulations except where violations are specifically allowed in accordance with a Conditional Permit issued under Section 1.12.9.

1.13 Variances

1.13.1 Petition Procedures

(a) Any person subject to any rule or regulation, requirement or order, may petition the Commission for a variance from the application thereof as prescribed by the Act. A petition for a variance must state the following:

(1) The name, address and telephone number of the petitioner, or other person authorized to receive service of notices.

(2) Whether the petitioner is an individual, partnership, corporation or other entity, and names and address of the officers, if a corporation, and names and address of the persons in control, if other entity.

(3) The type of business or activity involved in the application and the street address at which it is conducted.

(4) A brief description of the article, machine, equipment or other contrivance, if any, involved in the petition.

(5) The signature of the petitioner, or that of some person on his behalf, and, where the person signing is not the petitioner, the authority to sign.

(6) The rule or regulation, requirement or order complained of from which a variance is requested.

(7) The facts showing why compliance with such rule or regulation, requirement or order would impose serious hardship on the petitioner or on any other person or persons without equal or greater benefits to the public.

(8) The facts showing why the emissions occuring or proposed to occur do not endanger or tend to endanger human health or

safety, human comfort, and aesthetic values.

(9) For what period of time the variance is sought and why.

(10) Provisions of the rule or regulation, requirement or order which the petitioner can meet and the date when petitioner can comply with such provisions.

(11) Whether or not any case involving the same identical equipment or process identified in subparagraph (4) above is pending in any court, civil or criminal.

(b) All petitions shall be typewritten, double spaced, on legal or letter size paper, on one side of the paper only.

1.13.2 Failure to Comply with Procedures

(a) The Director shall not accept for filing, any petition which does not comply with these rules and regulations relating to the form, filing and service of petitions unless the Chairman or any two members of the Commission direct otherwise and confirm such direction in writing. Such direction need not be made at a meeting of the Commission.

(b) The Chairman or any two members, without a meeting, may require the petitioner to state further facts or reframe a petition so as to disclose clearly the issues involved.

1.13.3 Objection Procedures

(a) A person may file a written objection to the grant of a variance within 21 days from initial advertised notice and thus insure that a public hearing will be held, according to Section 12 (d) of the Act. An objection to the grant of a variance must state:

(1) The objector's name, address, and telephone number.

(2) Whether the objector is an individual, partnership, corporation or other entity, and names and address of the partners if a partnership, names and address of the officers if a corporation, and the names and the address of the persons in control if other entity.

(3) A specification of which petition for a variance is being objected to.

(4) A statement indicating why the objector believes that the variance should not be granted.

(b) All objections should be typewritten or carefully printed in ink on legal or letter size paper.

1.13.4 Rules of Evidence at Hearing

(a) Each party shall have these rights: to call and examine witnesses; to introduce exhibits; to cross-examine opposing witnesses on any matter relevant to the issues even though that matter was not covered in the direct examination; to impeach any witness regardless of which party first called him to testify; and to rebut the evidence against him. If a petitioner or objector does not testify in his own behalf, he may be called and examined as if under cross-examination.

(b) The hearing need not be conducted according to technical rules relating to evidence and witnesses. Any relevant evidence shall be submitted if it is the sort of evidence on which responsible persons are accustomed to rely in the conduct of serious affairs, regardless of the existence of any common law or statutory rule which may make improper the admission of such evidence over objection in civil actions. Hearsay evidence may be used for the purpose of supplementing or explaining any direct evidence but shall not be sufficient in itself to support a finding unless it would be admissible over objection in civil actions. The rules of privilege shall be effective to the same extent that they are now or hereafter may be recognized in civil actions, and irrelevant and unduly repetitious evidence shall be excluded.

1.14 Circumvention

No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate these rules and regulations.

1.15 Severability

The provisions of these rules and regulations and the various applications thereof are declared to be severable and if any chapter, part, section, paragraph, subparagraph, subdivision, clause, or phrase of these rules and regulations shall be adjudged to be invalid or unconstitutional by any court of competent jurisdiction, the judgment shall not affect, impair or invalidate the remainder of these rules and regulations, but shall be confined in its operation to the chapter, part, section, paragraph, subparagraph, subdivision, clause, or phrase of these rules and regulations that shall be directly involved in the controversy in which such judgments shall have been rendered.

1.16 Bubble Provision

(a) Notwithstanding the specific emission limitations contained in Chapters 3, 4, 5, and 7, the Director may allow a facility to reduce the level of control required at one source in exchange for an equal increase in the level of control required at another source. Approval of any such exchange shall not be granted unless it is consistent with the requirements of Federal and State law.

(b) Any such approval granted will not be effective until it becomes a part of the approved State Implementation Plan.

CHAPTER 2

AIR POLLUTION EMERGENCY

2.1 Air Pollution Emergency

The Director is authorized and empowered to enforce or require enforcement of any provisions of this Chapter through the State of Alabama.

2.2 Episode Criteria

When the Director determines that conditions justify the proclamation of an air pollution episode stage, due to the accumulation of air contaminants in any place within the State, attaining levels which could, if sustained or exceeded, lead to a substantial threat to the health of persons, he shall be guided by the following criteria.

2.2.1 Episode stages shall be determined and declared upon the basis of average concentrations recorded at any monitoring station in the State.

2.2.2 If contamination and meteorology warrant, any advanced episode stage may be declared by the Director without first declaring a lesser degree of Alert or Watch. The Director shall, at his discretion, declare a lesser stage, the termination or the continuance of the advanced episode stage during such times when contamination and meteorological conditions moderate significantly after an advanced episode stage has been declared.

2.2.3 Episode Watch

The Director shall declare an Episode Watch when one or more of the following events take place.

(a) An Atmospheric Stagnation Advisory is issued by the National Weather Service, stating that atmospheric conditions marked by a slow moving high pressure system, light winds, and temperature inversions are expected to affect the State of Alabama or portions thereof for the next 36 hours.

(b) A forecast by local meteorologist that stagnant atmospheric conditions as described above could result in high air pollution levels in Alabama or portions thereof.

(c) Validated reports of abnormally high air pollution measurements, specifically, reaching or exceeding 50 percent of the Alert level of Section 2.2.4 for at least three consecutive hours at a given locality in the State.

2.2.4 Alert

The Director shall declare an Alert when any one of the following contaminant concentrations is measured at any monitoring site, and due to adverse meteorological conditions can be expected to remain at these levels or higher for the next 12 hours or more unless control measures are taken:

(a) Sulfur Dioxide - Measured by continuous coulometric or colorimetric analyzer, or equivalent.

24 hour average, 0.30 ppm (800 $\mu g/m^3$)

(b) Particulates - Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 3.0 COHS per 1000 linear feet

or measured by Hi Vol (high volume sampler), 24-hour accumulation.

24-hour average, 375 $\mu g/m^3$

(c) Sulfur Dioxide and Particulates Combined - Product of concurrent 24-hour average concentrations.

sulfur dioxide, ppm, times particulates, COHS, equals 0.2

sulfur dioxide, $\mu g/m^3$, times particulates, ug/m^3, equals 65,000

(d) Carbon Monoxide - Measured by continuous non-dispersive infrared analyzer, or equivalent.

8-hour average, 15 ppm (17 mg/m^3)

(e) Nitrogen Dioxide - Measured by continuous analyzer, or equivalent.

24-hour average, 0.15 ppm (282 $\mu g/m^3$)
or 1-hour average, 0.6 ppm (1130 $\mu g/m^3$)

(f) Photochemical Oxidants - Measured by continuous chemiluminescent analyzer or equivalent.

1-hour average, 0.15 ppm (295 $\mu g/m^3$)

2.2.5 Warning

A warning shall be declared by the Director when the concentrations of any of the following air contaminants measured at any monitoring site and due to adverse meteorological conditions can be expected to remain at these levels or higher for the next 12 hours or more unless control measures are taken:

(a) Sulfur Dioxide - Measured by continuous coulometric or colorimetric analyzer, or equivalent.

(b) Particulates - Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 5.0 COHS per 1000 linear feet

or measured by Hi Vol, 24-hour accumulation:

24 hour average, 625 $\mu g/m^3$

(c) Sulfur Dioxide and Particulates Combined - Product of concurrent 24-hour average concentration.

sulfur dioxide, ppm, times particulates, COHS, equals 0.8

or sulfur dioxide, $\mu g/m^3$, times particulates, $\mu g/m^3$, equals 261,000

(d) Carbon Monoxide - Measured by continuous non-dispersive infrared analyzer or equivalent.

8-hour average, 30 ppm (34 mg/m^3)

(e) Nitrogen Dioxide - Measured by continuous analyzer, or equivalent.

24-hour average, 0.30 ppm (565 $\mu g/m^3$)

1-hour average, 1.20 ppm (2260 $\mu g/m^3$)

(f) Photochemical Oxidants - Measured by continuous chemiluminescent analyzer, or equivalent.

1-hour average, 0.40 ppm (800 $\mu g/m^3$)

2.2.6 Emergency

When the following concentrations of air contaminants have been reached or due to meteorological conditions can be expected to reach or exceed these levels at any monitoring site in the State for a period of 12 hours or more unless control actions are taken, the Director shall declare an Emergency:

(a) Sulfur Dioxide - Measured by continuous coulometric or colorimetric analyzer, or equivalent.

24-hour average, 0.8 ppm (2100 $\mu g/m^3$)

(b) Particulates - Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 7.0 COHS per 1000 linear feet

or measured by Hi Vol, 24-hour accumulation

24-hour average 875 $\mu g/m^3$

(c) Sulfur Dioxide and Particulates Combined - Product of concurrent 24-hour average concentrations.

sulfur dioxide, ppm times particulates, COHS, equals 1.2

or sulfur dioxide, $\mu g/m^3$, times particulates $\mu g/m^3$, equals 393,000

(d) Carbon Monoxide - Measured by continuous non-dispersive infrared analyzer or equivalent.

8-hour average, 40 ppm (46 mg/m^3)

(e) Nitrogen Dioxide - Measured by continuous analyzer, or equivalent.

24-hour average, 0.40 ppm (750 $\mu g/m^3$)

1-hour average, 1.60 ppm (3000 $\mu g/m^3$)

(f) Photochemical Oxidants - Measured by continuous chemiluminescent analyzer, or equivalent.

1-hour average, 0.50 ppm (1000 $\mu g/m^3$)

2.2.7 Termination

(a) The status reached by application of the Episode Criteria of this part shall remain in effect until the criteria for that level is no longer met. At such time, the next lower status will be assumed and such changes declared by the Director. Specifically:

(1) When ambient contaminant concentrations fall below the critical levels for the stage, and a downward trend of concentrations is established; and

(2) When meteorological conditions that attended the high concentrations are no longer called for in official weather predictions.

(b) A public declaration will take on one of the following forms.

(1) Terminate "Emergency Status", resume "Warning Status" or "Alert Status"; whichever is appropriate.

(2) Terminate "Warning Status", resume "Alert Status" or appropriate stage.

(3) Terminate "Episode Status".

(c) Upon termination of an "Episode Status", the Division of Air Pollution Control will remain on internal "Episode Watch" until a return to normal operation is announced by the Division Director.

2.2.8 Status Declaration Authority

The Director, Division of Air Pollution Control, or his duly authorized agent, shall have the authority to make an announcement of internal Episode Watch, and public declarations of Alert, Warning and Emergency Status.

2.3 Special Episode Criteria

2.3.1 The Director shall have the authority to declare episodic conditions when the atmospheric concentration of a single contaminant or that of a specific locality within the State show elevated concentrations.

2.3.2 Specific Pollutant Situation

When concentrations of one or two contaminants reach or exceed the defined criteria levels, and concentration of other contaminants remain substantially below 50 percent of Alert levels, and meteorlogical conditions are such that these specific contaminant concentrations can be expected to remain at the above levels for 12 hours or more or increase unless control action is taken, a Specific Alert, Warning, or Emergency Status shall be declared by the Director, naming the contaminants that meet the respective criteria. In such instances when two such contaminants meet different criteria, the Director shall declare the status for the episode having the higher level, and that an Episode Watch is being maintained on the remaining contaminants.

2.3.3 Specific Locality Situation

The Director shall, when high concentrations of one or more contaminant measured at one monitoring site and not others and the effect is judged to originate from an identifiable source near the given site, shall declare the appropriate local Alert, Warning, or Emergency Status for the delineated area and that an Episode Watch is in effect for any remaining portion of the jurisdictional area while meteorological conditions favor the maintenance or increase of said high concentration for at least 12 hours or more unless control action is taken.

2.4 Emission Reduction Plans

Upon declaring an Episode Watch, Alert, Warning, or Emergency, the Director shall order persons responsible for the operation of a source of air contaminants causing or contributing to such episode to take the general measures outlined in the Emergency Episode Plan for the State of Alabama (dated November 1971, prepared by TRW, Inc.) or revision thereof, as he deems appropriate, in addition to all specific source curtailments designated by him.

2.5 Two Contaminant Episode

The Director shall declare an Alert, Warning, or Emergency Status specific for two contaminants when the ambient concentrations of two contaminants simultaneously reach or exceed their respective Episode Criteria of this Chapter and meteorological conditions are such that contaminant concentrations can be expected to remain at those criteria levels for 12 or more hours or increase unless control actions are taken. When criteria levels correspond to different episode status for two contaminants, the Director shall declare the status of the higher of the two.

2.6 General Episodes

The Director shall, in the event that ambient concentrations of three or more contaminants simultaneously reach or exceed their respective

Episode Criteria and no improvement in meteorological conditions is forecast for the next 12 hours, declare a General Alert, Warning, or Emergency Status. In the event the criteria levels correspond to different statuses for each contaminant, the Director shall declare a general status corresponding to the highest individual status.

2.7 Emission Reduction Plan for Local Episodes

2.7.1 The Director shall specify the area of the State affected when a Local Alert, Warning or Emergency Status is declared, or when an Accidental Episode for Common contaminants occurs, based upon air quality and meteorological reports and predictions.

2.7.2 When the Director declares such a local episode, any person responsible for the operation from which excess emissions results, shall shut down such an operation and make repairs or alter the process as required by the Director to restore normal operations.

2.7.3 When the Director declares that a Local Alert, Warning, or Emergency Status is in effect for a delineated area, corresponding General Measures shall be applied as detailed in Part 2.4, depending upon which contaminant(s) is/are being emitted in excess.

2.8 Emission Reduction Plans for Other Sources

2.8.1 Any person responsible for the operation of a source of air contaminants as determined by the Director shall prepare standby plans for reducing the emissions of air contaminants during periods of an Episode Alert, Warning, and Emergency. Standby plans shall be designed to reduce or eliminate emissions of air contaminants in accordance with the objectives set forth in Part 2.4

2.8.2 Any person responsible for the operation of a source of air contaminants not designated by the Director shall when requested by the Director in writing, prepare standby plans for reducing the emission of air contaminants during periods of Episode Alert, Warning, and Emergency. Standby plans shall be designed to reduce or eliminate emissions of air contaminants in accordance with the objectives set forth in Part 2.4.

2.8.3 Standby plans as required under Section 2.8.1 shall be in writing and identify the sources of air contaminants, the amount of reduction of contaminants and a brief description of the manner in which reduction will be achieved during Episodes of Alert, Warning, and Emergency.

2.8.4 During Episodes of Alert, Warning, and Emergency Status, standby plans as required by this Chapter shall be made available on the premises to any person authorized to enforce the provisions of applicable rules and regulations.

2.8.5 Standby plans as required by these rules and regulations shall be submitted to the Director upon request within 30 days of the receipt of such request; such standby plans shall be subject to review and approval by the Director. If in the opinion of the Director, a standby plan does not effectively carry out the objectives as set forth in these rules and regulations, the Director may disapprove it, state the reason for disapproval and order the preparation of an amended standby plan within the time period specified in the order.

2.9 Other Authority Not Affected

The provisions of this Chapter shall in no way affect the power and authority of the Governor, Chairman, or Director as it pertains to Emergency Procedures as provided in Section 11 of the Act.

CHAPTER 3

CONTROL OF OPEN BURNING AND INCINERATION

3.1 Open Burning

No person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire except as follows:

3.1.1 Open fires for the cooking of food for human consumption on other than commercial premises;

3.1.2 Fires for recreational or ceremonial purposes;

3.1.3 Fires to abate a fire hazard, providing the hazard is so declared by the fire department or fire district having jurisdiction;

3.1.4 Fires for prevention or control of disease or pests;

3.1.5 Fires for training personnel in the methods of fighting fires;

3.1.6 Fires for the disposal of dangerous materials, where there is no practical alternate method of disposal, and burning is approved by the Director;

3.1.7 Fires set for recognized agricultural, silvicultural, range and wildlife management practices;

3.1.8 Fires set in salamanders or other devices used by construction or other workers for heating purposes;

3.1.9. Fires for the burning of trees, brush, grass and other vegetable matter in the clearing and maintenance of rights-of-way if such burning is done by the air-curtain incinerator method, properly constructed and maintained, or an equivalent method specifically approved by the Director;

3.1.10 Open fires specifically or expressly approved by the Director.

3.2 Incinerators

3.2.1 Incinerators shall be designed and operated in such manner as is necessary to prevent the emission of objectionable odors.

3.2.2 No person shall cause or permit to be emitted into the open air from any incinerator, particulate matter in the exhaust gases to exceed 0.20 pounds per 100 pounds of refuse charged; provided that: for incinerators of more than 50 tons per day charging rate, particulate matter in the exhaust gases may not exceed 0.10 pounds per 100 pounds of refuse charged.

3.2.3 Emission tests shall be conducted at maximum burning capacity of the incinerator.

3.2.4 The burning capacity of an incinerator shall be the manufacturer's or designer's guaranteed maximum rate or such other rate as may be determined by the Director in accordance with good engineering practices. In case of conflict, the determination made by the Director shall govern.

3.2.5 For the purposes of this Part, the total of the capacities of all furnaces within one system shall be considered as the incinerator capacity.

3.3 Incineration of Wood, Peanut, and Cotton Ginning Wastes

3.3.1 No person shall cause or permit to be emitted into the open air from any incinerator which incinerates wood, peanut, or cotton ginning wastes, particulate matter in the exhaust gases to exceed 0.40 pounds per 100 pounds of material charged.

3.3.2 Emission tests shall be conducted at maximum burning capacity of the incinerator.

3.3.3 The burning capacity of an incinerator shall be the manufacturer's or designer's guaranteed maximum rate or such other rate as may be determined by the Director in accordance with good engineering practices. In case of conflict, the determination made by the Director shall govern.

3.3.4 Each incinerator subject to this Part shall be properly designed, equipped, and maintained for its maximum burning capacity, and shall be equipped with a temperature recorder which shall be operated continuously with the incinerator and the temperature records shall be made available for inspection at the request of the Director, and shall either: (a) be equipped with an underfire forced air system, which shall be electronically controlled to insure the optimum temperature range for the complete combustion of the amount and type of material waste being charged into the incinerator; and a variable damper; or (b) consist of an all metal shell with refractory lining, circular furnace, and a built-in cinder catching system for either reburning or other disposition; all primary combustion air shall be supplied under pressure through nozzle openings located around the periphecy of the lower furnace; over-fire air shall be provided under pressure through ports which shall be directed downward and tangentially in the same direction as the primary air; cinder collection shall be accomplished by the provision of openings through the shell located above the furnace section.

3.3.5 Each incinerator subject to this Part shall be properly designed, equipped, and maintained for its maximum rated burning capacity and shall be equipped with an underfire forced air system, an overfire air recirculation secondary combustion system, and variable control damper, all of which shall be electronically controlled to insure the optimum temperature range for the complete combustion of the amount and type of material waste being charged into the incinerator. Each such incinerator shall be equipped with a temperature recorder which shall be operated continuously with the incinerator and the temperature records shall be made available for inspection at the request of the Director.

CHAPTER 4

CONTROL OF PARTICULATE EMISSIONS

4.1 Visible Emissions

4.1.1 Visible Emissions Restriction for Stationary Sources

(a) No person shall discharge into the atmosphere from any single source of emission whatsoever any air contaminant of a shade or density darker than that designated as No. 1 on the Ringelmann chart or 20 percent opacity.

(b) A person may discharge into the atmosphere from any single source of emission for a period or periods aggregating not more than three minutes in any 60 minutesair contaminants of a shade of density not darker than that designated as No. 3 on the Ringelmann chart or 60 percent opacity.

(c) The Director may approve exceptions to this Section for specific sources which hold permits under Part 1.12; provided however, such exceptions may be made for startup, shutdown, load change, and rate change or other short, intermittent periods of time upon terms approved by the Director and made a part of such permit.

(d) The provisions of this Section shall not apply to combustion sources in single-family and duplex dwellings where such sources are used for heating or other domestic purposes.

4.1.2 Reserved

4.1.3 Uncombined Water

Where the presence of uncombined water is the only reason for failure of an emission to meet the requirements of this Part, such sections shall not apply.

4.2 Fugitive Dust

4.2.1 No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

(b) Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stock piles, and other surfaces which create airborne dust problems;

(c) Installation and use of hoods, fans, and fabric filters (or other suitable control devices) to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

4.2.2 Visible Emissions Restrictions Beyond Lot Line

No person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

4.2.3 When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any rule or regulation, the Director may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.

4.2.4 The owner or operator of any source or combination of sources on contiguous property which have the potential to emit 100 T/yr of particulates and which are located in the nonattainment areas of Etowah, Jefferson, or Mobile must submit a plan for control of fugitive dust and fugitive emissions to the Director for approval. Such plan

(a) Shall address both fugitive dust and fugitive emissions.

(b) Shall demonstrate that control measures will produce reduction in particulates from the major sources equivalent to the application of reasonably available control measures (RACM, control technology that is reasonably available considering technological and economic feasibility). RACM shall be as stringent as those measures identified as reasonably available in Table 3.4.1 of the "Support Document, SIP Revision, Etowah County, TSP Nonattainment Area" (November 14, 1978); Appendix E of the "Support Document, SIP Revision, Mobile TSP Nonattainment Area" (November 14, 1978); and Table 3.4.1 of the "Support Document, Nonattainment SIP Revision, Jefferson County, TSP Nonattainment Area" (November 14, 1978). RACM shall be determined on a case-by-case basis for sources not covered by the above references.

(c) Shall contain a compliance schedule for each source with a final compliance date of no later than December 31, 1979 for control of emissions from storage piles, October 31, 1980 for control of emissions from sources other than storage piles by use of wet suppression, or December 31, 1982 for all other sources.

(1) Such schedules for storage piles shall specify increments of progress to be achieved no later than the dates in the following schedule:

(i) Final plans for control of emissions shall be submitted by August 1, 1979.

(ii) Contracts for the necessary emission control system shall be issued by September 30, 1979.

(iii) Initiation of any necessary on-site construction shall begin by October 31, 1979.

(iv) On-site construction or installation of emission control equipment shall be completed and final compliance achieved by December 31, 1979.

(2) Such schedules for use of wet suppression systems on sources other than storage piles shall specify increments of progress to be achieved no later than the dates in the following schedule:

(i) Final plans for control of emissions shall be submitted by October 1, 1979.

(ii) Contracts for the necessary emission system shall be issued by January 1, 1980.

(iii) Initiation of any necessary on-site construction shall begin by March 31, 1980.

(iv) On-site construction or installation of emission control system shall be completed and final compliance achieved by October 31, 1980.

(3) Such schedules for all other sources shall specify increments of progress to be achieved no later than the dates in the following schedules:

(i) Final plans for control of emissions shall be submitted by October 1, 1979.

(ii) Contracts for the necessary emission control system shall be issued by October 1, 1980.

(iii) Initiation of on-site construction or installation of the emission control equipment shall begin by January 31, 1981.

(iv) On-site construction or installation of the emission control system shall be completed by October 31, 1982.

(v) Final compliance shall be achieved by December 31, 1982.

(d) May propose an alternative compliance schedule for approval by the Director provided:

(1) That demonstration is submitted to support that the application of the compliance schedule in 4.2.4(c) would be infeasible;

(2) The proposed alternative compliance schedule contains the same increments of progress as the schedule for which it is proposed; and

(3) That final compliance is achieved as expeditiously as practicable, but not later than December 31, 1982.

4.3 Fuel Burning Equipment

4.3.1 Class 1 Counties: No person shall cause or permit the emission of particulate matter from fuel-burning equipment in a Class 1 county in excess of the amount shown in Table 4-1 for the heat input allocated to such source. For sources in Class 1 counties, interpolation of the data in Table 4-1 for heat input values between 10 million BTU/hr and 250 million BTU/hr shall be accomplished by the use of the equation:

$$E = 1.38H^{-0.44}$$

where: E = Emissions in lb/million BTU

H = Heat Input in millions of BTU/hr

4.3.2 Class 2 Counties

No person shall cause or permit the emission of particulate matter from fuel-burning equipment in a Class 2 county in excess of the amount shown in Table 4-1 for the heat input allocated to such source. For sources in Class 2 counties, interpolation of the data in Table 4-1 for heat input values between 10 million BTU/hr and 250 million BTU/hr shall be accomplished by the use of the equation:

$$E = 3.109H^{-0.589}$$

where: E = Emissions in lb/million BTU

H = Heat Input in millions of BTU/hr

4.3.3 For purposes of this Part, the total heat input from all similar fuel combustion units which discharge particulate matter through a common stack at a plant or premises shall be used for determining the maximum allowable emission of particulate matter.

4.3.4 New fuel-burning sources emitting particulate matter shall be subject to the rules and regulations for Class 1 Counties, Section 4.3.1, regardless of their location

TABLE 4-1 ALLOWABLE PARTICULATE MATTER EMISSION BASED ON HEAT INPUT

Heat Input (millions of BTU/hr)	Allowable Emission (lb/million BTU) Class 1 County	Class 2 County
1.	.5	.8
10.	.5	.8
20.	.37	.53
40.	.27	.35
60.	.23	.28
80.	.20	.24
100.	.18	.21
150.	.15	.16
200.	.13	.14
250.	.12	.12
1,000,000.	.12	.12

4.4 Process Industries - General

4.4.1 Class 1 Counties

No person shall cause or permit the emission of particulate matter in any one hour from any source in a Class 1 county in excess of the amount shown in Table 4-2 for the process weight per hour allocated to such source. For sources in Class 1 counties, interpolation of the data in Table 4-2 for the process weight per hour values up to 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 17.31\, P^{0.16} \qquad P > 30 \text{ tons/hr}$$

where: E = Emissions in pounds per hour

P = Process weight per hour in tons per hour.

4.4.2 Class 2 Counties

No person shall cause or permit the emission of particulate matter in any one hour from any source in a Class 2 county in excess of the amount shown in Table 4-2 for the process weight per hour allocated to such source. For sources in Class 2 counties interpolation of the data in Table 4-2 for the process weight per hour values up to 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 4.10\, P^{0.67} \qquad P < 30 \text{ tons/hr}$$

and interpolation and exterpolation of the data for process weight per hour values equal to or in excess of 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 55.0\, P^{0.11} - 40 \qquad P > 30 \text{ tons/hr}$$

where: E = Emissions in pounds per hour

P = Process weight per hour in tons per hour

4.4.3 Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this Part, the interpretation that results in the minimum value for allowable emission shall apply.

4.4.4 For purposes of this Part, the total process weight from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter that passes through a stack or stacks.

4.4.5 New sources subject to this Part emitting particulate matter shall be subject to the rules and regulations for Class 1 counties, Section 4.4.1, regardless of their location.

TABLE 4-2 ALLOWABLE PARTICULATE MATTER EMISSION BASED ON PROCESS WEIGHT RATE

Process Weight Rate (lb/hr)	Allowable Emission Rate (lb/hr) Class 1 County	Allowable Emission Rate (lb/hr) Class 2 County
100	0.56	0.55
500	1.52	1.62
1,000	2.34	2.57
5,000	6.33	7.57
10,000	9.76	12.05
20,000	14.97	19.18
60,000	29.83	39.96
80,000	31.23	42.53
120,000	33.33	46.30
160,000	34.90	49.06
200,000	36.17	51.28
1,000,000	46.79	68.96

4.5 Small Foundry Cupola

4.5.1 No person shall cause or permit the emission of particulate matter in any one hour from any small foundry cupola source in excess of the amount shown in Table 4-3 for the process weight per hour allocated to such source.

4.5.2 Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this Part, the interpretation that results in the minimum value for allowable emission shall apply.

4.5.3 For purposes of this Part, the total process weight from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter that passes through a stack or stacks.

4.5.4 Foundry cupolas with a process weight rate greater than 50,000 pounds per hour shall be subject to the rules and regulations of Part 4.4.

TABLE 4-3 ALLOWABLE PARTICULATE MATTER EMISSION BASED ON PROCESS WEIGHT RATE FOR SMALL FOUNDRY CUPOLAS

Process Weight (lb/hr)	Allowable Emission Rate (lb/hr)
1,000	3.05
2,000	4.70
3,000	6.35
4,000	8.00
5,000	9.58
6,000	11.30
7,000	12.90
8,000	14.30
9,000	15.50
10,000	16.65
12,000	18.70
16,000	21.60
18,000	23.40
20,000	25.10
30,000	31.30
40,000	37.00
50,000	42.40

4.6 Cotton Gins

4.6.1 No person shall cause or permit the emission of particulate matter in any one hour from any cotton gin operation in excess of the amount shown in Table 4-4 for the process weight per hour allocated to such operation. Particulate matter emissions subject to this Part include process emissions and incinerator emissions if any; provided, however, that this shall in no way relieve or affect the application of Chapter 3 to open burning and incineration at cotton gin operations.

4.6.2 Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this Part, the interpretation that results in the minimum value for allowable emission shall apply.

4.6.3 For purposes of this Part, the total process weight from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter that passes through a stack or stacks.

TABLE 4-4 ALLOWABLE PARTICULATE MATTER EMISSION BASED ON PROCESS WEIGHT RATE FOR COTTON GINS

Process Weight Rate (lb/hr)	Allowable Emission Rate (lb/hr)	Process Weight Rate (lb/hr)	Allowable Emission Rate (lb/hr)
1,000	1.6	9,000	13.7
1,500	2.4	10,000	15.2
2,000	3.1	12,000	18.2
2,500	3.9	14,000	21.2
3,000	4.7	16,000	24.2
3,500	5.4	18,000	27.2
4,000	6.2	20,000	30.1
5,000	7.7	30,000	44.9
6,000	9.2	40,000	59.7
7,000	10.7	50,000	64.0
8,000	12.2	60,000 or more	67.4

4.7 Kraft Pulp Mills

4.7.1 Applicability

This Part applies to manufacturing facilities for the pulping of wood and the preparation and recovery of associated chemicals by the kraft process, including combined recovery systems serving other processes such as neutral sulfite pulping.

4.7.2

No person shall cause or permit the emission of particulate matter from any kraft pulp mill in excess of the amounts provided as follows:

(a) From all recovery furnaces, not more than 4.0 pounds per ton of pulp.

(b) From all smelt dissolver vents, not more than 0.5 pounds per ton.

(c) From all lime kilns, not more than 1.0 pounds per ton of pulp.

4.7.3

The pulp production rates for kraft mills referred to in this Part shall be tons of unbleached air-dried kraft pulp.

4.7.4

Notwithstanding the specific limits set forth in this Part, in order to maintain the lowest possible emission of air contaminants, the highest and best practicable treatment and control for particulate matter currently available shall be provided for new kraft pulp mills.

b

4.8 Wood Waste Boilers

4.8.1 Applicability

This Part applies to boilers and other indirect heat exchangers using not less than 30% wood wastes or wood by-products as fuel measured by heat input.

4.8.2

No person shall cause or permit the emission of particulate matter from any existing wood wastes boilers in excess of 0.30 grains per standard dry cubic foot adjusted to 50% excess air. Provided that: for any existing wood wastes boiler which must be modified in order to meet the emission limitations of this Part, no person shall cause or permit the emission of particulate in excess of:

(a) 0.17 grains per standard dry cubic foot, adjusted to 50% excess air for combination gas and woodwaste boilers.

(b) 0.20 grains per standard dry cubic foot, adjusted to 50% excess air for combination oil and wood wastes boilers.

(c) 0.23 grains per standard dry cubic foot, adjusted to 50% excess air for combination coal and wood wastes boilers.

(d) 0.20 grains per standard dry cubic foot, adjusted to 50% excess air for boilers using wood wastes only.

4.9 Coke Ovens

4.9.1 Applicability

The provisions of this Part shall apply to the production of coke in existing conventional slot-oven coke batteries with the exception of Section 4.9.10 which applied to new batteries.

4.9.2 Unloading and Transfer of Coal and Coke. Every person operating coke ovens shall apply all reasonable measures to prevent emissions from coal unloading, transfer, and coke transfer.

4.9.3 Charging

There shall be no visible emissions during the charging cycle from the charging holes or the larry car of any battery with an opacity which is greater than twenty percent (20%) (equivalent to Ringelmann No. 1) except for an average period or periods not to exceed three (3) minutes of any consecutive sixty (60) minutes on batteries with less than seventy (70) ovens nor more than four (4) minutes of any consecutive sixty (60) minutes on batteries with seventy (70) ovens or more.

4.9.4 Pushing

There shall be no visible emissions during the pushing cycle, other than water mist or vapor, with an opacity which is greater than forty percent (40%)(equivalent to Ringelmann No. 2) for more than one (1) push per hour per battery.

4.9.5 Topside Emissions

(a) Any leak discovered on the topside of a battery shall be wet sealed or the oven shall not be recharged until the necessary repairs are made.

(b) At no time shall there be leaks in more than ten percent (10%) of the offtake piping and no more than five percent (5%) of the charging hole lids on any one battery.

4.9.6 Coke Oven Doors

(a) There shall be no visible emissions except non-smoking flame, from any opening on the coke oven doors from more than fifteen percent (15%) of the coke oven doors on any battery at any time.

(b) If a self-sealing door fails to seal during the coking cycle, it shall be adjusted, repaired, or replaced prior to a subsequent charge of oven.

(c) Luted doors which fail to seal after the oven is charged shall be reluted promptly.

(d) Every person operating coke ovens shall have a facility to maintain and repair coke oven doors, and shall maintain an inventory of one (1) coke oven door per twelve (12) ovens operated.

4.9.7 Oven Maintenance

(a) All ovens shall be maintained in good condition to promote complete coking of coal.

(b) All coke oven cracks are to be sealed as soon as practicable after they are detected.

(c) As directed by the Director, reasonable records of the maintenance of oven doors, oven burners, and oven interiors are to be made and retained for a reasonable time.

4.9.8 Combustion Stacks

There shall be no visible emissions, other than water mist or vapor, of a shade or density darker than that designated as No. 1 on the Ringelmann chart or 20% opacity from any stack except for a period or periods aggregating not more than three minutes in any consecutive 60 minutes.

4.9.9 Quenching

(a) No person shall operate a coke oven plant without baffles installed and properly operating in the quench towers.

(b) Water introduced to the quenching station must be of a quality approved by the Director.

4.9.10 Notwithstanding the specific limits set forth in this Part, in order to maintain the lowest possible emission of air contaminants, the highest and best practicable treatment and control for particulate matter currently available shall be provided for any new coke producing facilities.

4.9.11 Charging Emissions

(a) Applicability:

(1) The provisions of this section apply to charging wet coal by use of a larry car in existing, conventional slot-oven coke batteries. Such coke batteries shall be in compliance with these provisions within one year after the date the Administrator of the U.S. Environmental Protection Agency approves this Section. On that date, the provisions of this Section will supercede the requirements of Section 4.9.3.

(2) For the purpose of this Section, charging emissions shall include any air contaminant emitted from one or more charging ports, spaces between charging ports, spaces between charging port rings and oven refractories, open chuck doors, drop sleeves, larry car hoppers, jumper pipes, standpipe caps (lids), or any device for the capture and cleaning of air contaminants beginning when the coal is introduced into the oven and continuing until the oven is closed to the atmosphere.

(b) Charging - At no time shall the aggregated times of visible emissions, other than water mist or vapor, exceed more than 94 seconds for any five (5) consecutive charges.

(c) Observation Procedures - The following techniques shall be used for measuring and recording visible emissions from any coke oven battery.

(1) Observations of open charging emissions shall be made from any point or points on the topside of a coke oven battery from which an observer can obtain an unobstructed view of the charging operation.

(2) The observer will determine and record the total number of seconds that charging emissions are visible during the charging of coal to the coke oven. The observer shall time the visible charging emissions with a stopwatch while observing the charging operation. Simultaneous emissions from more than one emission point shall be timed and recorded as one emission and shall not be added individually to the total time.

(3) Open charging emissions shall not include any emissions observed after all the charging port covers have been firmly seated following the removal of the larry car, such as emissions occurring when one cover is temporarily removed to permit the sweep-in of spilled coal.

(4) The total number of seconds of visible emissions observed, clock time for the initiation and completion of the charging operation, battery identification and oven number for each charge shall be recorded by the observer. In the event that observations of emissions from a charge are interrupted due to events beyond the control of the observer, the data from that charge shall be invalidated and the observer shall note on his observation sheet the reason for invalidating the data. The observer shall then resume observation of the next consecutive charge, or charges and continue until he has obtained a set of five charges for comparison with the emission standard.

(5) Compliance with subsection 4.9.11(b) of this section shall be determined by summing the seconds of charging emissions observed during each of the five charges.

4.9.12 Pushing Emissions from Existing Coke Oven Batteries

(a) Applicability:

(1) The provisions of this section are applicable only to coke oven batteries located in Jefferson and Etowah counties which do not satisfy the criteria specified in paragraph 4.9.13(a) of this section. Such batteries shall be in compliance with these provisions within three years after the date the Administrator of the U.S. Environmental Protection Agency approves this Section. On that date, the provision of the part will supercede Section 4.9.4. Coke oven batteries outside Jefferson and Etowah counties, and those covered by Section 4.9.13(a) of this Section, will remain subject to the provisions of Section 4.9.4.

(2) For the purpose of this section, pushing emissions are defined as any air contaminant emitted during pushing, the process by which coke is removed from a coke oven, including the period marked by the time when the doors are first removed from a coke oven until the quenching operation is commenced.

(b) All coke batteries shall be equipped with a device that will capture and collect coke side emissions resulting directly from the pushing operation. The collection device shall be such that the outlet gas shall contain no more than .03 pounds of non-condensible particulate matter per ton of coal charged for each oven, averaged over five (5) consecutive pushes.

(c) No person shall discharge into the atmosphere from the hot car, capture or collection device at any time, any visible emission which is darker in shade as that designated as No. 1 on the Ringelmann Chart or 20 percent opacity.

(d) Observation Procedures

The inspector shall evaluate the criteria listed below and select the most appropriate point to observe the visible emissions during the pushing cycle.

(1) The inspector should observe pushing emissions as close as he deems practical.

(2) The inspector should observe pushing emissions against the sky.

(3) The inspector should stand with the sun behind him and with the emissions moving in any direction except directly at or away from the inspector.

4.9.13 Interim Schedule of Compliance

(a) Coke oven batteries retired from service prior to December 31, 1982, will not be subject to the requirements contained in 4.9.12(a)-(d) upon the posting of a surety bond in the amount of $3,000,000, such surety bond contingent on shutting down the battery and, with no provision for extension whatsoever. Notification of intention to retire any battery from service and posting of the bond must be done within 90 days after the date the Administrator of the U.S. Environmental Protection Agency approves this Section.

(b) Except for coke oven batteries retired from service in accordance with Section 4.9.13(a) above, interim schedules of compliance with the changing and pushing regulations herein must be submitted within said 90 days after the date the Administrator of the U.S. Environmental Protection Agency approves this Section.

4.10 Primary Aluminum Plants

4.10.1 Applicability

This part applies to existing primary aluminum plants which will or do operate for the purpose of or related to producing aluminum metal from aluminum oxide (alumina).

4.10.2 Emission Limits

The emission of particulate matter to the plant shall be reduced to the lowest level consistent with the highest and best practicable technology available to the primary aluminum industry, but in no case shall the emission of solid particulate matter exceed fifteen (15) pounds per ton of aluminum produced on a daily basis, nor shall the emissions of total particulate matter exceed twenty-two (22) pounds per ton of aluminum produced on a daily basis.

4.10.3 Compliance

Each primary aluminum plant shall be in compliance with the provisions of this part at the earliest possible date but not later than May 31, 1975. Nothing in this part shall negate the requirement for obtaining permits or submitting compliance schedules are required by these rules and regulations.

4.11 Cement Plants

4.11.1 Applicability

This part applies to:

(a) Existing cement plants that have a process weight that is greater than 88.7 tons/hr.

(b) All existing cement plants in the primary nonattainment area for suspended particulates in Mobile County (Appendix D).

(c) New cement plants.

4.11.2 This part specifically exempts new cement plants from Section 4.4.5.

4.11.3 Emission Limits

(a) No owner or operator shall cause, permit, or allow the emission of particulate matter from the kiln which is in excess of 0.30 pounds per ton of feed to the kiln, maximum two-hour average.

(b) No owner or operator shall cause, permit, or allow the emission of particulate matter from the clinker cooler which is in excess of 0.10 pounds per ton of feed to the kiln, maximum two-hour average.

4.11.4 Compliance

Those cement plants located in the primary nonattainment area for suspended particulates in Mobile shall be in compliance with these provisions by January 1, 1982 and shall adhere to the increments of progress contained in the following schedule:

(1) Final plans for the emission control system must be submitted before December 31, 1979.

(2) Contracts for the emission control system must be awarded or orders must be issued for purchase of component parts to accomplish emission control before July 1, 1980.

(3) Initiation of on-site construction or installation of the emission control equipment must begin before December 31, 1980.

(4) On-site construction or installation of the emission control equipment must be completed before August 31, 1981.

(5) Final compliance shall be demonstrated before January 1, 1982.

4.11.5 Exception

Cement plants located in the primary nonattainment area for suspended particulates in Mobile County which shut down prior to December 31, 1982 will not be subject to the requirements contained in this part upon the posting of a Surety Bond in the amount of $100,000, such Surety Bond contingent on shutting down the battery and with no provision for extension.

4.12 Grain Elevators

4.12.1 Applicability

This Part applies to existing grain elevators which have a permanent storage capacity of more than 88,000 m^3 located in Mobile County, provided, however, that it does not apply to grain elevators located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.

4.12.2 Emission Limit

No owner or operator subject to this part shall cause, suffer, or allow the discharge into the atmosphere of any fugitive emission from:

(a) Any barge or ship loading station which exhibits greater than 20 percent opacity. Said emission limit shall be achieved by:

  (1) A telescoping loading spout which is kept extended to the grain surface and a ventilation applied at the end of the spout to a fabric filter.

  (2) A system demonstrated to have control efficiency equivalent to or greater than provided under paragraph 4.12.2(a)(1) and approved by the Director.

(b) Any barge or ship unloading station unless operated as follows:

  (1) The unloading leg shall be enclosed from the top (including the receiving hopper) and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper.

(2) The total rate of air ventilation shall be at least 32.1 actual cubic meters per meter of grain handling capacity.

(3) The owner or operator may use other methods of emission control demonstrated to have control efficiency equivalent to or greater than provided under paragraph 4.12.1(b)(1) and (2) and approved by the Director.

4.12.3 Compliance

Affected facilities shall be in compliance with the provisions of this Part at the earliest possible date, but no later than September 30, 1982, and shall adhere to the increments of progress contained in the following schedule:

(a) Final plans for the emission control system must be submitted before January 1, 1981.

(b) Contracts for the emission control systems must be awarded or orders must be issued for purchase of component parts to accomplish emission control before June 30, 1981.

(c) Initiation of on-site construction or installation of the emission control equipment must begin before August 31, 1981.

(d) On-site construction or installation of the emission control equipment must be completed before September 30, 1982.

(e) Final compliance shall be demonstrated before December 31, 1982.

4.13 Sintering Plants

4.13.1 Applicability

This Part applies to sintering plants in the iron and steel industry that have a process weight greater than 150 tons per hour.

4.13.2 Sinter Strand (Windbox Exhaust)

No owner or operator shall cause, permit, or allow the emissions of total particulate matter in excess of .26 pounds per ton of total strand burden (including the hearth layer) from all sources exhausting through the windbox.

4.13.3 Sinter Processing Equipment (Discharge, Hood, Sinter Breaker, Screens, Cooler, Conveyors, Conveyor Transfer Points)

(a) Controlled Emissions

(i) Particulate emissions from the control device shall not exceed .02 grains per dry standard cubic foot.

(ii) Visible emissions from the control device shall not exceed 1 percent opacity.

(iii) Sources whose gases are directed through the windbox exhaust are not subject to this requirement.

(b) There shall be no visible fugitive emissions from discharge hoods and breakers.

(c) Visible fugitive emissions from the screens, conveyors, and conveyor transfer points shall not exceed 10 percent opacity.

(d) Fugitive and visible emissions from the sinter cooler shall not exceed 1 percent opacity.

(e) Emission standards which are more restrictive for the above sources which have been previously established by applicable consent degree shall remain in effect for the operational life of those sources.

CHAPTER 5

CONTROL OF SULFUR COMPOUND EMISSIONS

5.1 Fuel Combustion†

5.1.1

(a) Sulfur Dioxide Category I Counties. No person shall cause or permit the operation of fuel burning installation in a Sulfur Dioxide Category I County or in Jefferson County in such a manner that sulfur oxides, measured as sulfur dioxide, are emitted in excess of 1.8 pounds per million BTU heat input.

(b) Sulfur Dioxide Category II Counties. No person shall cause or permit the operation of a fuel burning installation in a Sulfur Dioxide Category II County in such a manner that sulfur oxides, measured as sulfur dioxide, are emitted in excess of 4.0 pounds per million BTU heat input.

5.1.2 Air Quality Demonstration

In addition to the requirements of Section 5.1.1, every owner or operator of a fuel burning installation having a total rated capacity greater than 1500 million BTU per hour shall:

(a) Demonstrate, to the satisfaction of the Director, that the sulfur oxides emitted, either alone or in contribution to other sources, will not interfere with attainment and maintenance of any primary or secondary ambient air quality standard prescribed at Part 1.6.

(b) Demonstrate, to the satisfaction of the Director, that in meeting the emission limitations of Section 5.1.1, the installation will not increase emissions to the extent that resulting air quality concentrations will be greater than:

 (1) those concentrations (either measured or calculated) which existed in 1970; or

 (2) those concentrations (either measured or calculated) which existed during the first year of operation of any installation which began operating after January 1, 1970.

---

†The Widows Creek Steam Plant in Jackson County is not affected by revisions to Section 5.1. The original implementation plan emission limit of 12 lbs. $SO_2/10^6$ BTU heat input remains in effect for this facility.

(c) Upon the direction of the Director, install and maintain air quality sensors to monitor attainment and maintenance of ambient air quality standards in the areas influenced by the emissions from such installation. Results of such monitoring shall be provided to the Director in a manner and form as he shall direct.

5.1.3 For purposes of this part, the total heat input from all similar fuel combustion units at a plant, premises, or installation shall be used for determining the maximum allowable emission for sulfur dioxide that passes through a stack or stacks. Units constructed and operated to conform with the New Source Performance Standards shall not be considered similar to other units at a plant, permises, or installation.

5.1.4 All calculations performed pursuant to demonstrations required by Section 5.1.2, shall assume that the fuel burning installation is operating at or above the maximum capacity which such installation is capable of being operated.

5.1.6 To ensure that ambient air quality standards are met, an annual review of Sulfur Dioxide Category I and II Counties will be made by the staff. Initial Sulfur Dioxide Category classificationsand any subsequent changes to Sulfur Dioxide Category classifications will be the subject of a public hearing.

APPENDIX B

Sulfur Dioxide Priority Classifications of Counties

Category I Counties
1.8 lbs. SO_2 per 10^6 BTU

Jackson
Jefferson
Mobile

Category II Counties
4.0 lbs. SO_2 per 10^6 BTU

Autauga
Baldwin
Barbour
Bibb
Blount
Bullock
Butler
Calhoun
Chambers
Cherokee
Chilton
Choctaw
Clarke
Clay
Cleburne
Coffee
Colbert
Conecuh
Coosa
Covington
Crenshaw
Cullman
Dale
Dallas
DeKalb
Elmore
Escambia
Etowah
Fayette
Franklin
Geneva
Greene
Hale
Henry
Houston
Lamar
Lauderdale
Lawrence
Lee
Limestone
Lowndes
Macon
Madison
Marengo
Marion
Marshall
Monroe
Morgan
Montgomery
Perry
Pickens
Pike
Randolph
Russell
St. Clair
Shelby
Sumter
Talledega
Tallapoosa
Tuscaloosa
Walker
Washington
Wilcox
Winston

5.2 Sulfuric Acid Plants

5.2.1 Applicability

This section applies to existing sulfuric acid plants operating as of January 18, 1972.

(a) No person shall cause or permit sulfur dioxide tail gas emissions from sulfuric acid manufacturing plants to exceed 27 lbs. per ton of 100 percent sulfuric acid produced; provided however, that no sulfuric acid manufacturing plant emitting less than 27 lbs. per ton of 100 percent sulfuric acid produced shall be allowed to increase its emission rate.

(b) No person shall cause or permit tail gas acid mist emissions to exceed 0.5 lbs. per ton of sulfuric acid produced, and the sulfur trioxide emissions are not to exceed 0.2 lbs. per ton of sulfuric acid produced.

5.2.2 Applicability

This section applies to all sulfuric acid plants not included in Section 5.2.1.

(a) No person shall cause or permit the discharge into the atmosphere of sulfur dioxide in excess of 4 lbs. per ton of sulfuric acid produced, maximum two-hour average.

(b) No person shall cause or permit the discharge into the atmosphere of acid mist which is in excess of 0.15 lbs. per ton of acid produced maximum two-hour average, expressed as H_2SO_4.

5.2.3 There shall be installed, calibrated, maintained, and operated in any sulfuric acid production unit subject to the provisions of this Part, an instrument for continuously monitoring and recording emissions of sulfur dioxide.

5.2.4 Any instrument and sampling system installed and used pursuant to this Part shall be subject to the approval of the Director.

5.3 Petroleum Production

5.3.1 Applicability

This regulation applies to facilities that handle natural gas or refinery gas that contains more than 0.10 grains of hydrogen sulfide per standard cubic foot (SCF).

5.3.2 No person shall cause or permit the emission of a process gas stream containing more than 0.10 grains of hydrogen sulfide per SCF into the atmosphere unless it is properly burned to maintain the ground level concentrations of hydrogen sulfide to less than 20 parts per billion beyond plant property limits, averaged over a 30-minute period.

5.3.3 No person shall cause or permit the sulfur oxide emission from any facility designed to dispose of or process natural gas or refinery gas containing more than 0.10 grains hydrogen sulfide per standard cubic foot to exceed the following:

CATEGORY I COUNTIES

Available Sulfur (Long Tons/Day)	Permitted Emissions of Sulfur Dioxide
Up to 5	No Limit
5 to 35	373 lbs/hour
35 to 75	0.10 lbs. SO_2/lb. S processed
Over 75	0.08 lbs. SO_2/lb. S processed

CATEGORY II COUNTIES

Available Sulfur (Long Tons/Day)	Permitted Emissions of Sulfur Dioxide
Up to 10	No Limit
10 to 50	560 lbs/hour
50 to 100	0.10 lbs. SO_2/lb. S processed
Over 100	0.08 lbs. SO_2/lb. S processed

The allowable emissions of sulfur dioxide are increased as follows to allow for dry acid gas streams containing less than 60 percent hydrogen sulfide:

Mol Percent of Hydrogen Sulfide in Dry Acid Gas	Additional SO_2 Emissions Allowed
50% but less than 60%	.02 lbs. SO_2/lb. S processed
40% but less than 50%	.04 lbs. SO_2/lb. S processed
30% but less than 40%	.06 lbs. SO_2/lb. S processed
20% but less than 30%	.10 lbs. SO_2/lb. S processed
Less than 20%	

5.3.4(a) For purposes of this Part, the following counties are classified as Category I Counties: Jackson, Jefferson, and Mobile.

5.3.4(b) For purposes of this Part, those counties not listed in paragraph 5.3.4(a) are classified as Category II Counties.

5.3.5 Compliance with this Part shall be determined by both material balances and stack sampling. New plants are required either to install monitors to continuously determine the sulfur oxide emissions in terms of mass per unit of time or to determine the sulfur oxide emissions by other means approved by the Director.

5.3.6 In calculating the ground level concentration that results from short-term waste gas or emergency flaring, it shall be assumed that only 75 percent of the heat of combustion is used to heat the products of combustion.

5.3.7 Air Quality Demonstration

In addition to the requirements of Section 5.3.3, every owner or operator of a facility covered by Rule 5.3 shall demonstrate, to the satisfaction of the Director, that the sulfur oxides emitted, either alone or in conjunction with other sources, will not interfere with attainment and maintenance of any primary or secondary ambient air quality standard.

5.3.8 To insure that ambient air quality standards are met, an annual review of Sulfur Dioxide Category I and II Counties will be made by the staff. Initial Sulfur Dioxide Category Classifications and any subsequent changes to Sulfur Dioxide Category Classifications will be the subject of a public hearing.

5.5 Process Industries - General

5.5.1 Applicability

This part applies to facilities not regulated by Parts 5.1, 5.2, 5.3, and 5.4.

5.5.2 No person shall construct and operate a new or modified sulfur compound emission source that does not meet any and all applicable New Source Performance Standards and utilize the best available control technology, with consideration to the technical practicability and economic reasonableness of reducing or eliminating the emissions from the facility.

5.5.3 No person shall construct and operate a new or modified emission source that will cause or contribute to a condition such that either the primary or the secondary sulfur dioxide ambient air quality standards are exceeded in the area.

Chapter 6 - Control of Organic Emissions

6.1 Applicability

6.1.1 The provisions of this chapter apply to all sources of VOC in accordance with schedules contained in Part 6.15 except;

(a) VOC sources with a potential VOC emission rate of less than 100 tons/year.

(b) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance provided;

(1) the operation of the sources is not an integral part of the production process; and

(2) the emission from sources do not exceed 363 kilograms (800 pounds) in any calendar month.

(c) Parts 6.2 and 6.3 shall not apply to sources which are located in any county with the exception of Mobile and which were built prior to January 30, 1973.

6.1.2 In addition, the provisions of Part 6.3 shall apply to sources which are located in Mobile County regardless of construction date and to sources located in all other counties which were constructed or otherwise come into being after January 30, 1973 regardless of the exceptions provided in Section 6.1.1.

6.2 VOC Water Separation.

6.2.1 No person shall use any compartment of any single or multiple compartment VOC water separator which receives effluent water containing 1,000 gallons a day or more of any VOC from processing, refining, treating, storing, or handling VOC's, unless such compartment is equipped with one of the following vapor loss control devices, properly installed, in good working order, and in operation;

(a) a container having all openings sealed and totally enclosing the liquid contents. All gauging and sampling devices shall be gas-tight, except when gauging or sampling is performed.

(b) a container equipped with a floating roof consisting of a pontoon type, double-deck type roof or internal floating cover which shall rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof edge and containing walls. All gauging or sampling devices shall be gas-tight, except when gauging or sampling is performed.

(c) a container equipped with a vapor recovery system consisting of a vapor gathering system capable of collecting the VOC vapors and gases discharged and a vapor disposal system capable of processing such VOC vapors and gases so as to prevent their emission into the atmosphere. All container gauging and sampling devices shall be gas-tight, except when gauging or sampling is performed.

(d) a container having other equipment of equal efficiency for purposes of air pollution control as may be approved by the Director.

6.3 Loading and Storage of VOC.

6.3.1 No person shall place, store, or hold in any stationary storage vessel of more than 1,000-gallon capacity any VOC unless such vessel is a pressure tank or is equipped with one of the following vapor loss control devices;

(a) a permanent submerged fill pipe (storage vessels in existence prior to January 30, 1973 may employ portable submerged fill pipe).

(b) a floating roof, consisting of a pontoon type, double-deck type roof or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure or seal or seals to close the space between the roof edge and tank wall. This control equipment shall not be permitted if the VOC's have a vapor pressure of 11.0 pounds per square inch absolute (568 mmHg) or greater under actual storage conditions. All tank gauging or sampling devices shall be air-tight except when tank gauging or sampling is performed.

(c) a vapor recovery system, consisting of a vapor gathering system capable of collecting the VOC vapors and gases discharged and a vapor disposal system capable of processing such VOC vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is performed.

(d) other equipment or means of equal efficiency for purposes of air pollution control as may be approved by the Director.

6.3.2 No person shall;

Load any VOC's into any tank truck, or trailer having a capacity in excess of 200 gallons from any terminal or bulk storage facility unless such terminal or facility is equipped with a vapor collection and disposal system, or its equivalent, properly installed, in good working order, or has in operation a loading system which will result in a 95 percent submerged fill either with a submerged fill pipe or by loading from the bottom.

Where the vapor collection and disposal system is utilized, the loading arm shall be equipped with a vapor collection adaptor, pneumatic, hydraulic, or other mechanical means which will provide a vapor-tight seal between the adaptor and the hatch. A means shall be provided to prevent liquid organic compound drainage from the loading device when it is removed from the hatch of any tank, truck, or trailer. When loading is effected through means other than the hatches, all loading lines shall be equipped with fittings which make vapor-tight connections and which will close automatically when disconnected.

6.3.3 This part shall not apply to crude petroleum produced, separated, treated, or stored in the field.

6.4 Fixed-Roof Petroleum Liquid Storage Vessels.

6.4.1 For the purpose of Part 6.4, the following definitions apply:

(a) "Condensate" means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.

(b) "Crude oil" means a naturally occurring mixture which consists of hydrocarbons and/or sulfur, nitrogen and/or oxygen derivatives of hydrocarbons and which is a liquid in the reservoir and at standard conditions.

(c) "Custody transfer" means the transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other form of transportation.

(d) "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(e) "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floated upon the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(f) "Petroleum liquids" means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

(g) "Petroleum refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

6.4.2 This part will apply to all fixed roof storage vessels with capacities greater than 150,000 liters (40,000 gallons, containing petroleum liquids whose true vapor pressure (TVP) is greater than 10.5 kilo Pascals (1.52 psia). Vessels containing petroleum liquids whose TVP is equal to or less than 10.5 kPa are exempt, provided that records are maintained of the average monthly storage temperature and TVP of the petroleum liquid stored if the product has a stored TVP greater than 7.0 kPa.

6.4.3 Part 6.4 will not apply to petroleum liquid storage vessels;

(a) equipped with external floating roofs before July 1, 1979; or

(b) having capacities less than 1,600,000 liters (423,000 gallons) used to store produced crude oil and condensate prior to lease custody transfer.

6.4.4 Except as provided under Section 6.4.3 of this part, no owner or operator of an affected source under Section 6.4.2 of this part shall permit the use of such source unless;

(a) the source has been retrofitted with an internal floating roof equipped with a closure seal or seals to close the space between the roof edge and tank wall; or

(b) the source has been retrofitted with equally effective alternative control, approved by the Director; and

(c) the source is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials; and

(d) all openings, except stub drains are equipped with covers, lids, or seals such that;

(1) the cover, lid, or seal is in the closed position at all times except when in actual use; and

(2) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg support; and

(3) rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting; and

(e) routine inspections are conducted through roof hatches once every six months; and

(f) a complete inspection of cover and seals is conducted whenever the tank is emptied for nonoperational reasons.

6.5 Bulk Gasoline Plant.

6.5.1 For the purpose of this part, the following definitions apply:

(a) "Bottom filling" means the filling of a tank truck or stationary storage tank through an opening that is flush with the tank bottoms.

(b) Bulk gasoline plant" means a gasoline storage and distribution facility with an average daily throughput equal to or less than 76,000 liters (20,000 gallons) which receives gasoline from bulk terminals by trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and gasoline dispensing facility.

(c) "Splash filling" means the filling of a tank truck or stationary tank through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.

(d) "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

6.5.2 This part will apply to the unloading, loading, and storage operations of all bulk gasoline plants and all tank trucks or trailers delivering or receiving gasoline at bulk gasoline plants, except;

(a) stationary storage tanks of less than 7,580 liters (2,000 gallons) capacity; or

(b) plants with less than 15,160 liter (4,000 gallons) average daily gasoline throughput based on actual days of operation.

6.5.3 Except as provided under section 6.5.2 of this part, no owner or operator of a bulk gasoline plant may permit stationary storage tanks to load or unload gasoline unless each tank is equipped with a vapor balance system as described under section 6.5.6 of this part and approved by the Director; and

(a) each tank is equipped with a submerged fill pipe, approved by the Director; or

(b) each tank is equipped with a fill line whose discharge opening is not over 18 inches from the bottom of the tank.

6.5.4 Except as provided under section 6.5.2 of this part, no owner or operator of a bulk gasoline plant, tank truck, or trailer may permit the loading or unloading of tank trucks or trailers at a bulk gasoline plant unless each tank truck or trailer is equipped with a vapor balance system as described under section 6.5.6 of this part and approved by the Director; and

(a) equipment is available at the bulk gasoline plant to provide for the submerged filling of each tank truck or trailer; or

(b) each tank truck or trailer is equipped for bottom filling.

6.5.5 No owner or operator of a bulk gasoline plant, tank truck, or trailer may permit the transfer of gasoline between tank truck or trailer and stationary storage tank unless;

(a) the transfer is conducted in accordance with section 6.5.3 and 6.5.4 of this part; and

(b) the vapor balance system is in good working order and is connected and operating; and

(c) tank truck or trailer hatches are covered at all times during loading operations; and

(d) there are no leaks in the tank trucks' and trailers' pressure/vacuum relief valves and hatch covers, or the truck tanks or storage tanks, or associated vapor and liquid lines during loading or unloading; and

(e) the pressure relief valves on aboveground storage vessels and tank trucks or trailer are set to release at no less than 4.8 kPa (0.7 psi) or the highest possible pressure (in accordance with state or local fire codes or the National Fire Prevention Association guidelines).

6.5.6 Vapor balance system required under section 6.5.3 and 6.5.4 of this part shall consist of the following major components;

(a) a vapor space connection on the stationary storage tank equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of organic compounds; and

(b) a connecting pipe or hose equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of organic compounds; and

(c) a vapor space connection on the tank truck or trailer equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of organic material.

6.5.7 No owner or operator of a bulk gasoline plant may permit the disposal of waste gasoline in sewers, open containers or in a manner that would result in evaporation.

6.6 Bulk Gasoline Terminals.

6.6.1 For the purpose of this part, the following definitions apply:

(a) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from its supply source primarily by pipelines, ships, barges and delivers gasoline to bulk gasoline plant or to commercial or retail accounts primarily by tank trucks; and has an average daily throughput of more than 76,000 liters (20,000 gallons) of gasoline.

6.6.2 This part will apply to bulk gasoline terminals and the appurtenant equipment necessary to load the tank truck or trailer compartments.

6.6.3 No person may load gasoline into any tank truck or trailer from any bulk gasoline terminal unless;

(a) the bulk gasoline terminal is equipped with a vapor recovery system capable of complying with section 6.6.4 of this part, properly installed, in good working order, in operation, and consisting of one of the following;

(1) an adsorber or condensation system which processes and recovers at least 90 percent by weight of all vapors and gases from the equipment being controlled; or

(2) a vapor collection system which directs all vapors to a fuel gas system; or

(3) a control system demonstrated to have control efficiency equivalent to or greater than section 6.6.3(a)(1) or 6.6.3(a)(2) of this part and approved by the Director; and

(b) all displaced vapors and gases are vented only to the vapor control system; and

(c) a means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected; and

(d) all loading and vapor lines are equipped with fittings which make vapor-tight connections and which close automatically when disconnected.

6.6.4 Sources affected under paragraph 6.6.3(a) may not allow mass emissions of VOC's from control equipment to exceed 80 milligrams per liter (4.7 grains per gallon) of gasoline loaded.

6.6.5 Sources affected under section 6.6.2 may not; (a) allow the pressure in the vapor collection system to exceed the tank truck or trailer pressure relief settings; nor (b) allow the disposal of waste gasoline in sewers, open containers or in a manner that would result in evaporation.

6.7 Gasoline Dispensing Facility - Stage I.

6.7.1 For the purpose of this section, the following definitions apply:

(a) "Delivery Vessel" means tank trucks or trailers equipped with a storage tank and used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities.

(b) "Gasoline Dispensing Facility" means any outlet where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

6.7.2 This part will apply to all gasoline dispensing facilities except;

(a) transfers made to storage tanks or gasoline dispensing facilities equipped with floating roof or their equivalent;

(b) transfers made to stationary gasoline storage tanks of less than 7,580 liters (2,000 gallons) capacity in place before July 1, 1979 and of less than 948 liters (250 gallons) installed after July 1, 1979;

(c) stationary gasoline storage containers of less than 2,085 liters (550 gallons) capacity used exclusively for the fueling of implements of husbandry, provided the containers are equipped with submerged fill pipe.

6.7.3 No owner or operator may transfer, cause, or allow the transfer of gasoline from any delivery vessel into any stationary storage tank subject to this part, unless the tank is equipped with a submerged fill pipe and the vapors displaced from the storage tank during filling are processed by a vapor control system in accordance with section 6.7.4 of this part.

6.7.4 The vapor control system required by section 6.7.3 of this part shall include one or more of the following;

(a) vapor-tight line from the storage tank to the delivery vessel and a system that will ensure the vapor line is connected before gasoline can be transferred into the tank; or

(b) a refrigeration condensation system or equivalent designed to recover at least 90 percent by weight of the organic compounds in displaced vapor; or

(c) a system demonstrated to have control efficiency equivalent to or greater than provided under paragraph 6.7.4(a) or 6.7.4(b) of this part and approved by the Director.

6.7.5 The vapor-laden delivery vessel shall be subject to the following conditions;

(a) the delivery vessel must be designed and maintained to be vapor tight during loading, unloading operations, and transport, with the exception of normal pressure vacuum venting as required by DOT regulations;

(b) the vapor-laden delivery vessel may be refilled only at;

(1) bulk gasoline plants complying with 6.5; or

(2) bulk gasoline terminals complying with 6.6..

6.8 Petroleum Refinery Sources.

6.8.1 For the purpose of this part, the following definitions apply:

(a) "Accumulator" means the reservoir of a condensing unit receiving the condensate from the condenser.

(b) "Condenser" means any heat transfer device used to liquify vapors by removing their latent heats of vaporization. Such devices include, but are not limited to, shell and tube, coil, surface, or contact condensers.

(c) "Firebox" means the chamber or compartment of a boiler or furnace in which materials are burned, but does not mean the combustion chamber of an incinerator.

(d) "Hot well" means the reservoir of a condensing unit receiving the warm condensate from the condenser.

(e) "Refinery fuel gas" means any gas which is generated by a petroleum refinery process unit and which is combusted, including any gaseous mixture of natural gas and fuel gas.

(f) "Turnaround" means the procedure of shutting a refinery unit down after a run to do necessary maintenance and repair work and putting the unit back on stream.

centrifugal blower or compressor or any jet ejector or device that takes suction from a pressure below atmosphere and discharges against atmospheric pressure.

6.8.2 This part will apply to vacuum producing systems and process unit turnarounds at petroleum refining sources.

6.8.3 The owner or operator of any vacuum producing systems at a petroleum refinery may not permit the emission of noncondensable VOCs from the condensers, hot wells, or accumulators of the system unless;

(a) the vapors are combusted in a firebox or incinerator; or

(b) the vapors are added to the refinery fuel gas.

6.8.4 Before April 1, 1979, the owner or operator of a petroleum refinery shall develop and submit to the Director for approval a detailed procedure for minimizing VOC emissions during process unit turnaround. As a minimum, the procedure shall provide for;

(a) depressurization venting of the process unit or vessel to a vapor recovery system, flare, or firebox; and

(b) no emission of VOCs from a process unit or vessel until its internal pressure is 136 kilo Pascals (19.6 psia) or less.

6.8.5 The owner or operator of any wastewater (oil/water) separators at a petroleum refiner shall;

(1) Provide covers and seals approved by the Director, on all separators and forebays; and,

(2) Equip all openings in covers, separators, and forebays with lids and seals such that the lids or seals are in the closed position at all times except when in actual use.

6.9 Pumps and Compressors. All pumps and compressors handling VOCs and located in Mobile County shall have mechanical seals or other equipment of equal efficiency for purposes of air pollution as may be approved by the Director.

6.10 Ethylene Producing Plant. No person shall emit into the atmosphere a waste gas stream from any ethylene producing plant which is located in Mobile County, unless the waste gas stream is properly burned at 1300°F for 0.3 seconds or greater in a direct-flame afterburner equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level or an equally effective catalytic vapor incinerator also with pyrometer.

6.11 Surface Coating.

6.11.1 Can Coating.

(a) For the purpose of this section, the following definitions apply:

(1) "End sealing compound" means a synthetic rubber compound which is coated on to can ends and which functions as a gasket when the end is assembled on the can.

(2) "Exterior base coating" means a coating applied to the exterior of a can to provide exterior protection to the metal and to provide background for the lithographic or printing operation.

(3) "Interior base coating" means a coating applied by roller coater or spray to the interior of a can to provide a protective lining between the can metal and product

(4) "Interior body spray" means a coating sprayed on the interior of the can to provide a protective film between the product and the can.

(5) "Overvarnish" means a coating applied directly over ink to reduce the coefficient of friction, to provide gloss, and to protect the finish against abrasion and corrosion.

(6) "Three-piece can side-seam spray" means a coating sprayed on the exterior and interior of a welded, cemented, or soldered seam to protect the exposed metal.

(7) "Two-piece can exterior end coating" means a coating applied by roller coating or spraying to the exterior of a can to provide protection to the metal.

(b) This section will apply to coating applicator(s) and oven(s) of sheet, can, or end coating lines involved in sheet basecoat (exterior and interior) and overvarnish; two-piece can exterior (basecoat and overvarnish); two- and three-piece can interior body spray; two-piece can exterior end (spray or roll coat); three-piece can side-seam spray, and end sealing compound operations.

(c) no owner or operator of a can coating line subject to this section shall cause, allow, or permit the discharge into the atmosphere of any VOC's in excess of ;

(1) 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water, delivered to the coating applicator from sheet basecoat (exterior and interior) and overvarnish or two-piece can exterior (basecoat and overvarnish) operations.

(2) 0.51 kilograms per liter of coating (4.2 pounds per gallon), excluding water, delivered to the coating applicator from two- and three-piece can interior body spray and two-piece can exterior end (spray or roll coat) operations.

(3) 0.66 kilograms per liter of coating (5.5 pounds per gallon) excluding water, delivered to the coating applicator from three-piece can side seam spray operations.

(4) 0.44 kilograms per liter of coating (3.7 pounds per gallon), excluding water, delivered to the coating applicator from end sealing compound operations.

6.11.2 Coil Coating.

(a) For the purpose of this section, the following definitions apply:

(1) "Coil coating" means the coating of any flat metal sheet or strip that comes in rolls or coils.

(2) "Quench area" means a chamber where the hot metal exiting the oven is cooled by either a spray of water or a blast of air followed by water cooling.

(b) This section will apply to the coating applicator(s), oven(s), and quench area(s) of coil coating lines involved in prime and top coat or single coat operations.

(c) No owner or operator of a coil coating line subject to this section may cause, allow, or permit the discharge into the atmosphere of VOC's in excess of 0.31 kilograms per liter of coating (2.6 pounds per gallon), excluding water, delivered to the coating applicator from prime and topcoat or single coat operations.

6.11.3 Metal Furniture Coating.

(a) For the purpose of this section, the following definitions apply:

(1) "Application area" means the area where the coating is applied by spraying, dipping, or flowcoating techniques.

(2) "Metal furniture coating" means the surface coating of any furniture made of metal or any metal part which will be assembled with other metal, wood, fabric, plastic, or glass parts to form a furniture piece.

(b) This section will apply to the application areas, flashoff area(s), and oven(s) of metal furniture coating lines involved in prime and topcoat or single coating operations.

(c) No owner or operator of a metal furniture coating line subject to this section may cause, allow, or permit the discharge into the atmosphere of any VOC's in excess of 0.36 kilograms per liter of coating (3.0 pounds per gallon), excluding water, delivered to the coating applicator from prime and topcoat or single coat operations.

6.11.4 Surface Coating of Large Appliance.

(a) For the purpose of this section. the following definitions apply:

(1) "Application area" means the area where the coating is applied by spraying, dipping, or flowcoating techniques.

(2) "Single coat" means a single film of coating applied directly to the metal substrate omitting the primer application.

(3) "Large appliances" means doors, cases, lids, panels, and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and other similar products.

(b) This section will apply to application area(s), flashoff area(s), and oven(s) of large appliance coating lines involved in prime, single, or topcoat coating operations.

(c) This section will not apply to the use of quick-drying lacquers for repair of scratches and nicks that occur during assembly, provided that the volume of coating does not exceed 757 liters (200 gallons) in any one year.

(d) No owner or operator of a large appliance coating line subject to this section may cause, allow, or permit the discharge into the atmosphere of any VOC's in excess of 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water, delivered to the coating applicator from prime, single, or topcoat coating operations.

6.11.5 Automobile and Light Duty Truck Manufacturing.

(a) For the purpose of this section, the following definitions apply:

(1) "Application area" means the area where the coating is applied by dipping or spraying.

(2) "Manufacturing plant" means a facility where automobile and truck bodies are manufactured and/or finished for eventual assembly into a finished product ready for sale to vehicle dealers. Customizer, body shops, and other repainters are not part of this definition.

(3) "Automobile" means all passenger cars or passenger car derivations capable of seating 12 or fewer passengers.

(4) "Light-duty trucks" means any motor vehicles rated at 3,864 kilograms (8,500 pounds) gross weight or less which are designed primarily for the purpose of transportation or are derivatives of such vehicles.

(b) This section will apply to the application area(s), flashoff area(s), and oven(s) of automotive and light-duty truck manufacturing plants involved in prime, topcoat, and final repair coating operations.

(c) No owner or operator of an automobile or light-duty manufacturing plant subject to this section may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of;

(1) 0.23 kilograms per liter of coating (1.2 pounds per gallon), excluding water, delivered to the applicator from prime application, flashoff area, and oven operations.

(2) 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water, delivered to the applicator from surfacer application, flashoff area, and oven operations.

(3) 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water, delivered to the applicator from topcoat application, flashoff area, and oven operations.

(4) 0.58 kilograms per liter of coating (4.8 pounds per gallon), excluding water, delivered to the applicator from final repair application, flashoff area, and oven operations.

6.11.6 Paper Coating

(a) For the purpose of this section, the following definitions apply:

(1) "Knife coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a knife that spreads the coating evenly over the full width of the substrate.

(2) "Paper coating" means coatings put on paper and pressure sensitive tapes regardless of substrate. Related web coating processes on plastic film and decorative coatings on metal foil are included in this definition.

(3) "Roll coating" means the application of a coating material to a substrate by means of hard rubber or steel rolls.

(4) "Rotogravure Coating" means the application of a coating material to a substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

(b) This section will apply to roll, knife, or rotogravure coater(s) and drying ovens of paper coating lines.

(c) No owner or operator of a paper coating line subject to this section may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 0.35 kilograms per liter of coating (2.9 pounds per gallon), excluding water, delivered to the coating applicator from a paper coating line.

6.11.7 Fabric and Vinyl Coating

(a) For the purpose of this section, the following definitions apply:

(1) "Fabric coating" means the coating of a textile substrate with a knife, roll, or rotogravure coater to impart properties that are not initially present, such as strength, stability, water or acid repellancy, or appearance.

(2) "Knife coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a knife that spreads the coating evenly over the full width of the substrate.

(3) "Roll coating" means the application of a coating material to a substrate by means of hard rubber or steel rolls.

(4) "Rotogravure coating" means the application of a coating material to a substrate by means of roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

(5) "Vinyl coating" means to apply a decorative or protective topcoat or printing on vinyl coated fabric or vinyl sheets.

(b) This section will apply to roll, knife, or rotogravure coater(s) and drying ovens of fabric and vinyl coating lines.

(c) No owner or operator of a fabric coating line or a vinyl coating line subject to this section may cause, allow, or permit discharge into the atmosphere of any volatile organic compounds in excess of;

(1) 0.35 kilograms per liter of coating (2.9 pounds per gallon), excluding water, delivered to the coating applicator from a fabric coating line.

(2) 0.45 kilograms per liter of coating (3.8 pounds per gallon), excluding water, delivered to the coating applicator from a vinyl coating line.

6.11.8 Magnet Wire Coating

(a) For the purpose of this section, the following definition applies:

"Magnet wire coating" means the process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

(b) This section will apply to oven(s) of magnet wire coating operations.

(c) No owner or operator of a magnet wire coating oven subject to this section may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 0.20 kilograms per liter of coating (1.7 pounds per gallon), excluding water, delivered to the coating applicator from magnet wire coating operations.

6.11.9 Compliance Methods.

(a) The emission limits under this part shall be achieved by;

(1) the application of low solvent content coating technology; or

(2) incineration, provided that 90 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or

(3) a system demonstrated to have control efficiency equivalent to or greater than provided under paragraph 6.11.9(a)(1) or 6.11.9(a)(2) of this section and approved by the Director; or

(b) the design, operation, and efficiency of any capture system used in conjunction with paragraphs 6.11.9(a)(2) and 6.11.9(a)(3) of this section shall be certified by the owner or operator and approved by the Director.

6.12 Solvent Metal Cleaning

6.12.1 For the purpose of this part, the following definitions apply:

(a) "Cold cleaning" means the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition.

(b) "Conveyorized degreasing" means the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized solvents.

(c) "Freeboard height" means for a cold cleaner, the distance from the liquid solvent level in the degreaser tank to the lip of the tank. For vapor degreasers it is the distance from the solvent level in the tank to the lip of the tank.

(d) "Freeboard ratio" means the freeboard height divided by the width of the degreaser.

(e) "Open top vapor degreasing" means the batch process of cleaning and removing soils from metal surfaces by condensing hot solvent vapor on the colder metal parts.

(f) "Solvent metal cleaning" means the process of cleaning soils from metal surfaces by cold cleaning or open top vapor degreasing or conveyorized degreasing.

6.12.2 This part will apply to cold cleaning, open top vapor degreasing, and conveyorized degreasing operations.

6.12.3 The provisions of this part shall apply with the following exceptions:

(a) Open top vapor degreasers with an open area smaller than one square meter (10.8 square feet) shall be exempt from this part.

(b) Conveyorized degreasers with an air/vapor interface smaller than 2.0 square meters (21.6 square feet) shall be exempt from this part.

6.12.4 Except as provided under section 6.12.3 of this part, the owner or operator of a cold cleaning device shall;

(a) equip the cleaner with a cover and the cover shall be so designed that it can be easily operated with one hand; if,

(1) the solvent volatility is greater than 2 kilo pascals (15 millimeters of mercury or 0.3 pounds per square inch) measured at 38°C (100°F); or

(2) the solvent is agitated; or

(3) the solvent is heated; and,

(b) equip the cleaner with a device for draining cleaned parts and if the solvent volatility is greater than 4.3 kilo pascals (32 millimeters of mercury or 0.6 pounds per square inch) measured at 38°C (100°F), equip the construct drainage device internally so that the parts are enclosed under the cover while draining, except that the drainage device may be external for applications where an internal type cannot fit into the cleaning system; and

(c) if the solvent volatility is greater than 4.3 kilo pascals (32 millimeters of mercury or 0.6 pounds per square inch) measured at 38°C (100°F) or if the solvent is heated above 50°C (120°F) install one of the following devices;

(1) freeboard that gives a freeboard ratio greater than or equal to 0.7; or

(2) water cover (solvent must be insoluble in and heavier than water); or

(3) other systems of equivalent control, such as refrigerated chiller or carbon absorption, approved by the Director; and

(d) provide a permanent, conspicuous label, summarizing the operating requirements; and

(e) close the cover whenever parts are not being handled in the cleaner; and

(f) drain the cleaned parts for at least 15 seconds or until dripping ceases; and

(g) if used, supply a solvent spray that is a solid fluid stream (not a fine, atomized, or shower type spray) at a pressure which does not cause excessive splashing; and

(h) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere.

K11

6.12.5 Except as provided under Section 6.12.3 of this part the owner or operator of an open top vapor degreaser shall;

(a) equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone; and

(b) provide the following safety switches;

(1) a condenser flow switch and thermostat which shuts off the heat if the condenser coolant is either not circulating or too warm; and

(2) a spray safety switch which shuts off the spray pump if the vapor level drops more than 10 centimeters (4 inches) below the bottom of the condenser coil; and

(3) a vapor level control thermostat which shuts off the heat when the level rises too high.

(c) install one of the following control devices;

(1) a freeboard ratio of greater than or equal to 0.75, and a powered or mechanically assisted cover if the degreager opening is greater than 1 square meter (10.8 square feet); or

(2) refrigerated chiller; or

(3) enclosed design (cover or door opens only when the dry part is actually entering or exiting the degreaser); or

(4) carbon adsorption system, with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area (when cover is open), and exhausting less than 25 parts per million of solvent averaged over one complete adsorption cycle; or

(5) a control system, demonstrated to have control efficiency equivalent to or greater than any of the above, and approved by the Director; and

(d) keep the cover closed at all times except when processing work loads through the degreaser; and,

(e) minimize solvent carryout by;

(1) racking parts to allow complete drainage; and

(2) moving parts in and out of the degreaser at less than 3.3 meters per minute (11 feet per minute); and

(3) holding the parts in the vapor zone at least 30 seconds or until condensation ceases; and

(4) tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and

(5) allowing parts to dry within the degreaser for at least 15 seconds or until visually dry; and

(f) not degrease porous or absorbent materials, such as cloth, leather, wood or rope; and

(g) not occupy more than half of the degreaser's open top area with a workload; and

(h) not load the degreaser to the point where the vapor level would drop more than 10 centimeters (4 inches) below the bottom of the condenser coil when the workload is lowered into the vapor zone; and

(i) always spray below the vapor level; and

(j) repair solvent leaks immediately, or shutdown the degreaser; and

(k) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere; and

(l) not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator; and

(m) not use ventilation fans near the degreaser opening nor provide exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreaser open area, unless necessary to meet OSHA requirements.

6.12.6 Except as provided under section 6.12.3 of this part, the owner or operator of a conveyorized degreaser shall;

(a) not use workplace fans near the degreaser opening nor provide exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreaser opening, unless necessary to meet OSHA requirements; and

(b) install one of the following control devices;

(1) refrigerated chiller; or

(2) carbon adsorption system with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) or air/vapor area (when downtime covers are open), and exhausting less than 25 parts per million of solvent by volume averaged over a complete adsorption cycle; or

(3) a system demonstrated to have a control efficiency equivalent to or greater than subparagraph 6.12.6(b)(1) or 6.12.6(b)(2) of this section and approved by the Director; and

(c) equip the cleaner with equipment, such as drying tunnel or rotating (tumbling) basket sufficient to prevent cleaned parts from carrying out solvent liquid or vapor; and

(d) provide the following safety switches;

(1) a condenser flow switch and thermostat which shuts off the heat if the condenser is either not circulating or too warm; and

(2) a spray safety switch which shuts off the spray pump or the conveyor if the vapor level drops more than 10 centimeters (4 inches) below the bottom of the condenser; and

(3) a vapor level control thermostat which shuts off the heat when the level rises too high; and

(e) minimize openings during operation so that entrances and exits will silhouette workloads with an average clearance between the parts and the edge of the degreaser opening of less than ten centimeters (4 inches) or less than 10 percent of the width of the opening; and

(f) provide downtime covers for closing off the entrance and exit during the shutdown hours; and

(g) minimize carryout emissions by;

(1) racking parts for best drainage; and

(2) maintaining the vertical conveyor speed at less than 3.3 meters per minute (11 feet per minute); and

(h) store waste solvent only in covered containers; and

(i) repair solvent leaks immediately, or shut down the degreasers; and

(j) not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator; and

(k) place downtime covers over entrances and exits of conveyorized degreasers immediately after the conveyors and exhaust are shut down and not remove them until just before start-up.

6.13 Cutback Asphalt.

6.13.1 For the purpose of this section, the following definitions apply:

(a) "Asphalt" means a dark brown to black cementitious material (solid, semisolid, or liquid in consistency) in which the predominating constituents are bitumens which occur in nature as such or which are obtained as residue in refining petroleum.

(b) "Cutback asphalt" means asphalt cement which has been liquefied by blending with petroleum solvents (diluents). Upon exposure to atmospheric conditions, the diluents evaporate, leaving the asphalt cement to perform its function.

(c) "Penetrating Prime Coat" means an application of low-viscosity liquid asphalt to an absorbent surface. It is used to prepare an untreated base for an asphalt surface. The prime penetrates the base and plugs the voids, hardens the top, and helps bind it to the overlying asphalt layer.

6.13.2 This part will apply to the manufacture and use of cutback asphalts in highway paving and maintenance operations in Jefferson, Mobile, Russell, Madison and Morgan Counties.

(a) After June 1, 1980, no person may cause, allow, or permit the sale or offering for sale, mixing, storage, use, or application of cutback asphalts without approval of the Director as provided in paragraph 6.13.2(b) of this part.

(b) The Director may approve the sale or offering for sale, mixing, storage, use, or application of cutback asphalts where;

(1) long-time stockpile storage is necessary; or

(2) the use or application commences on or after November of any year and such use or application is completed by February of the following year; or

(3) the cutback asphalt is to be used solely as a penetrating prime coat.

6.14 Petition for Alternative Controls.

6.14.1 Notwithstanding any requirements of Parts 6.2 through 6.13 of this Chapter, an owner or operator may petition the Director for permission to use alternative operational and/or control techniques for any emission point subject to the requirements of this Chapter, if each of the following requirements are satisfied;

(a) the petition is submitted within 3 months of EPA approval; and

(b) the petition demonstrates to the satisfaction of the Director that the reduction in VOC emissions achieved through use of the alternative technique is equivalent to that which would be expected from compliance with the applicable regulations.

6.14.2 Notwithstanding any requirements of Part 6.2 through 6.13 of this Chapter, an owner or operator may petition the Director for permission to substitute reductions in emissions for those regulated source categories below those required by these regulations for increase in emissions above allowable limits, (compliance is to be determined on a plant-wide basis, using a weekly weighted average) for the emission reductions required by these regulations, if each of the following requirements are satisfied;

(a) the petition is submitted within 3 months of EPA approval;

(b) the petition demonstrates to the satisfaction of the Director that sufficient additional reduction in VOC emission not required by the regulations will be achieved to assure that the aggregate reduction in VOC emissions is no less than the reductions in emission which would be expected from compliance with the regulations.

6.14.3 Alternative Control Technology.

(a) Notwithstanding any requirement of Part 6.2 through 6.13 of this Chapter, sources unable to achieve the levels of control specified in this Chapter on a technical or economic basis may petition the Director for permission on a case-by-case basis to establish the applicable reasonably available control technology.

(b) Any such change to the applicable reasonably available control technology will not be effective until it becomes a part of the approved State Implementation Plan.

6.15 Compliance Schedules

(EPA approval as used herein means final approval of this Chapter as part of the State Implementation Plan.)

6.15.1 Process and Emission Control Equipment Installations.

(a) Except as provided under 6.15.4 or 6.15.5, the owner or operator of a VOC emission source proposing to install and operate VOC emission control equipment and/or replacement process equipment to comply with this chapter shall adhere to the increments of progress contained in the following schedule;

(1) Final plans for the emission control system and/or process equipment must be submitted within 3 months of EPA approval.

(2) Contracts for the emission control system and/or process equipment must be awarded or orders must be issued for purchase of component parts to accomplish emission control within 6 months of EPA approval.

(3) Initiation of onsite construction or installation of the emission control and/or process equipment must begin within 9 months of EPA approval.

(4) On-site construction or installation of the emission control and/or process equipment must be completed within 15 months of EPA approval.

(5) Final compliance, shall be achieved within 16 months of EPA approval.

(b) Any owner or operator of an emission source subject to the compliance schedule of this section shall certify to the Director within 5 days after the deadline for each increment of progress, whether the required increment of progress has been met.

6.15.2 Low Solvent Content Coating.

(a) Except as provided under 6.15.4 or 6.15.5 or under paragraph (b) of this section, the owner or operator of a VOC emission source proposing to employ low solvent content coating technology to comply with this chapter shall adhere to the increments of progress contained in the following schedules;

(1) Final plans for the application of low solvent content coating technology must be submitted within 3 months of EPA approval.

(2) Research and development of low solvent content coating must be completed within 6 months of EPA approval.

(3) Evaluation of product quality and commerical acceptance must be completed within 1 year of EPA approval.

(4) Purchase orders must be issued for low solvent content coatings and process modifications within 15 months of EPA approval.

(5) Initiation of process modification must begin within 17 months of EPA approval.

(6) Process modifications must be completed and use of low solvent content coatings must begin within 22 months of EPA approval.

(7) Final compliance shall be achieved within 2 years of EPA approval.

(b) Where the Director determines that low solvent content coating technology has been sufficiently researched and developed for a particular application, the owner or operator of a VOC emission source proposing to comply with this chapter through application of low solvent content coatings shall adhere to the increments of progress contained in the following schedule;

(1) Final plans for the application of low solvent content coating technology must be submitted within 3 months of EPA approval.

(2) Evaluation of product quality and commercial acceptance must be completed within 6 months of EPA approval.

(3) Purchase orders must be issued for low solvent content coatings and process modifications within 9 months of EPA approval.

(4) **Initiation of** process modifications must begin within 11 months.

(5) Process modifications must be completed and use of low solvent content coatings must begin within 15 months of EPA approval.

(6) Final compliance shall be achieved within 16 months of EPA approval.

(c) Any owner or operator of a stationary source subject to the compliance schedule of this section shall certify to the Director within 5 days after the deadline for each increment of progress, whether the required increment of progress has been met.

6.15.3 Equipment Modification.

(a) Except as provided under 6.15.4 or 6.15.5, the owner or operator of a VOC emission source proposing to comply with this chapter by modification of existing processing equipment shall adhere to the increments of progress contained in the following schedule;

(1) Final plans for process modification must be submitted within 3 months of EPA approval.

(2) Contracts for process modifications must be awarded or orders must be issued for the purchase of component parts to accomplish process modifications within 5 months of EPA approval.

(3) Initiation of on-site construction or installation of process modifications must begin within 7 months of EPA approval.

(4) On-site construction or installation of process modifications must be completed within 10 months of EPA approval.

(5) Final compliance shall be achieved within 11 months of EPA approval.

(b) Any owner or operator of an emission source subject to the compliance schedule of this section shall certify to the Director within 5 days after the deadline for each increment of progress, whether the required increment of progress has been met.

(1) Class I: General Solvent-Type Paints. This class includes white linseed oil outside paint, white soya and phthalic alkyd enamel, white linseed o-phthalic alkyd enamel, red lead primer, zinc chromate primer, flat white inside enamel, white epoxy enamel, white vinyl toluene modified alkyd, white amino modified baking enamel, and other solvent-type paints not included in Class II.

(2) Class II: Varnishes and Lacquers. This class includes clear and pigmented lacquers and varnishes.

(3) Class III: Water Thinned Paints. This class includes emulsion or latex paints and colored enamels.

(d) For the purposes of this method, a representative sample of the surface coating shall be obtained at the point of delivery to the coater or any other point in the process that the Director approves.

(e) The volatile organic content of the sample shall be determined as follows:

(1) Assign the coating to one of the three classes in paragraph (c) of this section. Assign any coating not clearly belonging to Class II or III to Class I.

(2) Determine the density Dm (in grams/cubic centimeter) of the paint, varnish, lacquer, or related product according to the procedure outlined in ASTM D 1475-60, Standard Method of Test for Density of Paint, Varnish, Lacquer, and Related Products. Then, depending on the class of the coating, use one of the following specified procedures to determine the volatile content;

(i) Class I. Use the procedure in ASTM D 2369-73, Standard Method of Test for Volatile Content of Paints.

(A) Record the following information:

W_1 = Weight of dish and sample, grams

W_2 = Weight of dish and sample after heating, grams

S = Sample weight, grams.

(B) Compute the volatile organic content C_v (in grams/liter of paint) as follows:

$$C_v = \frac{(W_1 - W_2)(Dm)(10^3)}{S}$$

(C) To convert grams/liter to pounds/gallons, multiply

C_v by 8.3455×10^{-3}.

(ii) Class II. Use the procedure in ASTM D 1644-57 Method A, Standard Methods of Test for Nonvolatile Content of Varnishes (Do no use Method B).

(A) Record the following information:

A = Record of dish, grams

B = Weight of sample used, grams

C = Weight of dish and content after heating, grams.

(B) Compute the volatile organic content C_v (in grams/liter) as follows:

$$C_v = \frac{(A + B - C)\ (Dm)(10^3)}{B}$$

(C) To convert grams/liter to pounds/gallon,

multiply C_v by 8.3455×10^{-3}.

(iii) Class III. Use the procedure in ASTM D 2369-73, Standard Method of Test for Volatile Content of Paints.

(A) Record the same information as specified in paragraph (e)(2)(i) of this section.

(B) Determine the water content P (in percent water) of the paint according to the procedure outlined in Federal Standards 141a, Method 4082.1, Water in Paint and Varnishes (Karl Fisher Titration Method).

(C) Compute the nonaqueous volatile matter content C_v (in grams/liter) as follows:

$$C_v = \frac{(W_1 - W_2 - 0.01\ PS)\ (Dm)(10^3)}{S}$$

(D) To convert grams/liter to pounds/gallon,

multiply C_v by 8.3455×10^{-3}.

6.15.4 Alternative Compliance Schedules

(a) Nothing in this part shall prevent the Director from approving a separate schedule for any source, if he finds that the application of a compliance schedule in 6.15.1 through 6.15.3 would be infeasible or impracticable.

(b) Nothing in this part shall prevent the owner or operator of a VOC source from submitting to the Director a proposed alternative compliance schedule provided;

(1) the proposed alternative compliance schedule is submitted within 3 months of EPA approval, and;

(2) the final control plans for achieving compliance with this chapter are submitted simultaneously, and;

(3) the alternative compliance schedule contains the same increments of progress as the schedule for which it is proposed, and;

(4) sufficient documentation and certification from appropriate suppliers, contractors, manufacturers, or fabricators are submitted by the owner or operator of the VOC source to justify the dates proposed for the increments of progress.

(c) All alternative compliance schedules proposed or promulgated under this section shall provide for compliance of the VOC emission source with this chapter as expeditiously as practicable, but not later than December 31, 1982.

(d) Any schedule approved under this section may be revoked at any time if the source does not meet the increments of progress stipulated.

6.15.5 Exception. Section 6.15.1 through 6.15.4 will not apply to sources which are in compliance with this chapter before June 1, 1979 and have determined and certified compliance to the satisfaction of the Director within 3 months of EPA approval.

6.15.6 Exception. Nothing in this part shall prevent the Director from approving a separate schedule for any source beyond December 31, 1982, provided:

(a) the source is located in an attainment or unclassifiable area, and

(b) the source is proposing to use innovative technologies, and

(c) the extension will not interfere with reasonable further progress in attaining the National Ambient Air Quality Standard.

6.16 Test Methods and Procedures

6.16.1 Determination of Volatile Organic Content of Surface Coatings.

(a) This method applies to paint, varnish, lacquer, and surface coatings which are air-dried or force-dried.

(b) This method does not apply to any coating system requiring a special curing process such as;

(1) exposure to temperatures in excess of 110 C (230 F) to promote thermal cross-linking; or

(2) exposure to ultraviolet light to promote cross-linking.

(c) For the purposes of this method, the applicable surface coatings are divided into three classes. They are:

(1) Class I: General Solvent-Type Paints. This class includes white linseed oil outside paint, white soya and phthalic alkyd enamel, white linseed 0-phthalic alkyd enamel, red lead primer, zinc chromate primer, flat white inside enamel, white epoxy enamel, white vinyl toluene modified alkyd, white amino modified baking enamel, and other solvent-type paints not included in Class II.

(2) Class II: Varnishes and Lacquers. This class includes clear and pigmented lacquers and varnishes.

(3) Class III: Water Thinned Paints. This class includes emulsion or latex paints and colored enamels.

(d) For the purposes of this method, a representative sample of the surface coating shall be obtained at the point of delivery to the coater or any other point in the process that the Director approves.

(e) The volatile organic content of the sample shall be determined as follows:

(1) Assign the coating to one of the three classes in paragraph (c) of this section. Assign any coating not clearly belonging to Class II or III to Class I.

(2) Determine the density Dm (in grams/cubic centimeter) of the paint, varnish, lacquer, or related product according to the procedure outlined in ASTM D 1475-60, Standard Method of Test for Density of Paint, Varnish, Lacquer, and Related Products. Then, depending on the class of the coating, use one of the following specified procedures to determine the volatile content;

(i) Class I. Use the procedure in ASTM D 2369-73, Standard Method of Test for Volatile Content of Paints.

(A) Record the following information:

W_1 = Weight of dish and sample, grams

W_2 = Weight of dish and sample after heating, grams

S = Sample weight, grams.

(B) Compute the volatile organic content C_v (in grams/liter of paint) as follows:

$$C_v = \frac{(W_1 - W_2)(Dm)(10^3)}{S}$$

(C) To convert grams/liter to pounds/gallons, multiply C_v by 8.3455×10^{-3}.

(ii) Class II. Use the procedure in ASTM D 1644-50 Method A, Standard Methods of Test for Nonvolatile Content of Varnishes (Do not use Method B).

(A) Record the following information:

A = Record of dish, grams

B = Weight of sample used, grams

C = Weight of dish and content after heating, grams.

(B) Compute the volatile organic content C_v (in grams/liter) as follows:

$$C_v = \frac{(A + B - C)(Dm)(10^3)}{B}$$

(C) To convert grams/liter to pounds/gallon, multiply C_v by 8.3455×10^{-3}.

(iii) Class III. Use the procedure in ASTM D 2369-73, Standard Method of Test for Volatile Content of Paints.

(A) Record the same information as specified in paragraph (e)(2)(i) of this section.

(B) Determine the water content P (in percent water) of the paint according to the procedure outlined in Federal Standards 141a, Method 4082.1, Water in Paint and Varnishes (Karl Fisher Titration Method).

(C) Compute the nonaqueous volatile matter content C_v (in grams/liter) as follows:

$$C_v = \frac{(W_1 - W_2 - .01\ PS)(Dm)(10^3)}{S}$$

(D) To convert grams/liter to pounds/gallon, multiply C_v by 8.3455×10^{-3}.

6.16.2 Test Procedure for Determination of VOC Emissions From Bulk Gasoline Terminals.

(a) Principle. VOC mass emissions are determined directly using flow meters and hydrocarbon analyzers. The volume of liquid gasoline dispensed is determined by computation based on the metered quantity of gasoline at the loading rack. Test results are expressed in milligrams of hydrocarbons emitted per liter of gasoline transferred.

(b) Summary of the Method. This method describes the test conditions and test procedures to be followed in determining the emissions from systems installed to control volatile organic compound vapors resulting from tank truck and trailer loading operations at bulk terminals. Under this procedure direct measurements are made to compute the hydrocarbon mass exhausted from the vapor control system. All possible sources of leaks are qualitatively checked to insure that no uncontrolled vapors are emitted to the atmosphere. The results are expressed in terms of mass hydrocarbons emitted per unit volume of gasoline transferred. Emissions are determined on a total hydrocarbon basis. If methane is present in the vapors returned from the tank trucks or trailers, provisions are included for conversion to a total nonmethane hydrocarbon basis.

(c) Applicability. This method is applicable to determining VOC emission rates at tank truck and trailer gasoline loading terminals employing vapor collection systems and either continuous or intermittent vapor control systems. This method is applicable to motor tank truck and trailer loading only as per part 6.6.

(d) Apparatus. The components essential to the evaluation of emissions from gasoline loading terminals are;

(1) portable combustible gas detector equipped to read 0 to 100 percent of the lower explosive limit,

(2) flexible thermocouple with recorder,

(3) gas volume meter, sized for the expected exhaust flow rate and range,

(4) total hydrocarbon analyzer with recorder (flame ionization detector or nondispersive infrared equipped to read 0 to 10 percent by volume hydrocarbon as propane for vapor control systems which recover the vapor liquid, or 0 to 10,000 ppmv hydrocarbon as propane for incineration vapor control system),

(5) barometer to measure atmospheric pressure,

(6) gas chromatography/flame ionization detector with a column to separate C1 - C7 alkanes (used if methane is present in recovered vapors or if incineration is the vapor control technique).

(e) Test Requirements.

(1) No less than three 8-hour repetitions will be performed.

(2) During the test period, all loading racks shall be open for each produce line which is controlled by the system under test. Simultaneous use of more than one loading rack shall occur to the extent that such use would normally occur.

(3) Simultaneous use of more than one dispenser on each loading rack shall occur to the extent that such use would normally occur.

(4) Dispensing rates shall be set at the maximum rate at which the equipment is designed to be operated. Automatic product dispensers are to be used according to normal operating practices.

(5) Applicable operating parameters of the vapor control system shall be monitored to demonstrate that the control unit is operating at design levels. For intermittent vapor control systems employing a vapor holder, each test repetition shall include at least one fully automatic operation cycle of the vapor holder and control device. Tank trucks and trailers shall be essentially leak free as determined by the Director.

(f) Basic Measurements Required. The basic measurements essential to the evaluation of emissions from gasoline loading terminals are:

(1) the amount of gasoline dispensed from gasoline dispensers,

(2) leak check of all fittings and vents,

(3) the following items for the processing unit exhaust;

(i) temperature

(ii) pressure

(iii) volume of vapors

(iv) hydrocarbon concentration of vapors, if methane is present in recovered vapors.

(g) Test Procedure.

(1) Calibrate and span all instruments as outlined under paragraph (i) of this section.

(2) Install an appropriately sized gas meter on the exhaust vent of the vapor control system. For those vapor control systems where restrictions preclude the use of a volume meter or when incineration is used for vapor control, a gas flow rate meter (orifice, pitot tube, annubar, etc.) is necessary. At the meter inlet, install a thermocouple with recorder. Install a tap at the volume meter outlet. Attach a sample line for total hydrocarbon analyzer (0 to 10 percent as propane) to this tap. If the meter pressure is different than barometric pressure, install a second tap at the meter outlet and attach an appropriate manometer for pressure measurement. If methane analysis is required, install a third tap for connection to a constant volume sample pump/evacuated bag assembly as described in Method 3, Federal Register, 36.247 December 23, 1977.

(3) Measurements and data required for evaluating emissions from the system;

(i) at the beginning and end of each test repetition, record the volume readings on each product dispenser on each loading rack served by the system under test,

(ii) at the beginning of each test repetition and each two hours thereafter, record the ambient temperature and the barometric pressure,

(iii) for intermittent vapor control systems employing a vapor holder, the unit shall be manually started and allowed to process vapors in the holder until the lower automatic cut-off is reached. This cycle should be performed immediately prior to the beginning of the test repetition before readings under paragraph (g)(3)(i) of this section are taken. No loading shall be in progress during this manual cycle,

(iv) for each cycle of the vapor control system during each test repetition, record the start and stop time, the initial and final gas meter readings, and the average vapor temperature, pressure and hydrocarbon concentration. If a flow rate meter is used, record flow meter readouts continuously during the cycle. If required, extract a sample continuously during each cycle for chromatographic analysis for specific hydrocarbons,

(v) for each tank truck or trailer loading during the test period, check all fittings and seals on the tanker compartments with the combustible gas detector. Record the maximum combustible gas reading for any incidents of leakage of hydrocarbon vapors. Explore the entire periphery of the potential leak source with the sample hose inlet 1 cm (0.4 inches) away from the interface.

(vi) during each test period, monitor all possible sources of leaks in the vapor collection and control systems with the combustible gas indicator. Record the location and combustible gas reading for any incidents of leakage,

(vii) for intermittent vapor control systems, the control unit shall be manually started and allowed to process vapors in the holder until the lower automatic shutoff is reached at the end of each test repetition. Record the data required under paragraph (g)(3)(iv) of this section for this manual cycle. No loading shall be in progress during this manual cycle.

(h) Calculations.

(1) Terminology;

T_a = Ambient temperature (°C)

P_b = Barometric pressure (mmHg)

L_t = Total volume of liquid dispensed from all controlled racks during the test period (liters)

V_e = Volume of air-hydrocarbon mixture exhausted from the processing unit (M^3)

V_{es} = Normalized volume of air-hydrocarbon mixture exhausted NM^3 @ 20°C, 760 mmHg

C_e = Volume fraction of hydrocarbons in exhausted mixture (volume % as $C_3H_{10}/100$, corrected for methane content if required)

T_e = Temperature at processing unit exhaust (°C)

P_e = Pressure at processing unit exhaust (mmHg abs)

$(M/L)_e$ = Mass of hydrocarbons exhausted from the processing unit per volume of liquid loaded (mg/l).

(2) Calculate the following results for each period of the vapor control system operation;

(i) Volume of air-hydrocarbon mixture exhausted from the vapor control system:

$V_e = V_{ef} - V_{ei}$; or

V_e = totalized volume from flow rate and time records

(ii) normalized volume of exhausted mixture:

$$V_{es} = \frac{(0.3858\ °K/mmHg)\ V_e P_e}{(T_e + 273.2)}$$

(iii) mass of hydrocarbons exhausted from the vapor control system:

$$M_e = (1.833 \times 10^6 \frac{mg C_3H_8)}{NM^3 C_3H_8} \times V_{es} C_e$$

(3) calculate the average mass of hydrocarbons emitted per volume of gasoline loaded:

$$(M/L)_e = \frac{\Sigma M_e}{L_t}$$

(i) Calibrations.

(1) Flow meters shall be calibrated using standard methods and procedures which have been approved by the Director.

(2) Temperature recording instruments shall be calibrated prior to a test period and following the test period using an ice bath (0°C) and a known reference temperature source of about 35°C. Daily during the test period, use an accurate reference to measure the ambient temperature and compare the ambient temperature reading of all other instruments to this value.

(3) Manufacturer's instructions concerning warm-up and adjustments shall be followed for total hydrocarbon analyzers. Prior to and immediately after the emission test, perform a comprehensive laboratory calibration on each analyzer used. Calibration gases should be propane in nitrogen prepared gravimetrically with mass quantitites of approximately 100 percent propane. A calibration curve shall be provided using a minimum of five prepared standards in the range of concentrations expected during testing;

(i) For each repetition, zero with zero gas (3 ppm C) and span with 70 percent propane for instruments used in the vapor lines and with 10 percent propane for instruments used at the vapor control system exhaust.

(ii) The zero and span procedure shall be performed at least once prior to the first test measurements, once during the middle of the run, and once following the final test measurement for each run.

(iii) Conditions in calibration gas cylinders must be kept such that condensation of propane does not occur. A safety factor of 2 for pressure and temperature is recommended.

6.16.3 Determination of Volatile Organic Compound Emission Control System Efficiency.

(a) The provisions of this section are generally applicable to any test method employed to determine the collection or control efficiency of any device or system designed, installed, and operated for the purpose of reducing volatile organic compound emissions.

(b) The following procedures shall be included in any efficiency demonstration:

(1) The volatile organic compound containing material shall be sampled and analyzed in a manner approved by the Director such that the quantity of emissions that could result from the use of the material can be quantified.

(2) The efficiency of any capture system used to transport the volatile organic compound emissions from their point of origination to the control equipment shall be computed by using accepted engineering practice and in a manner approved by the Director.

(3) Samples of the volatile organic compound containing gas stream shall be taken simultaneously at the inlet and outlet of the emissions control device in a manner approved by the Director.

(4) The total combustible carbon content of the samples shall be determined by a method approved by the Director.

(5) The efficiency of the control device shall be expressed as the fraction of total combustible carbon content reduction achieved.

(6) The volatile organic compound mass emission rate shall be the sum of emissions from the control device, emissions not collected by the capture system, and capture system losses.

6.16.4 Determination of Solvent Metal Cleaning Volatile Organic Compound Emissions.

(a) This method is applicable to determining volatile organic compound emissions from solvent metal cleaning equipment.

(b) The purpose of this method is to quantify, by material balance, the amount of solvent input into a degreaser over a sufficiently long period of time so that an average emission rate can be computed.

(c) The folowing procedure shall be followed to perform a material balance test:

(1) Clean the degreaser sump before testing.

(2) Record the amount of solvent added to the tank with a flow meter.

(3) Record the weight and type of work load degreased each day.

(4) At the end of the test run, pump out the used solvent and measure the amount with a flow meter. Also, estimate the volume of metal chips and other material remaining in the emptied sump, if significant.

(5) Bottle a sample of the used solvent and analyze it to find the percent that is oil and other contaminants. The oil and solvent proportions can be estimated by weighing samples of used solvent before and after boiling off the solvent. Compute the volume of oils in the used solvent. The volume of solvent displaced by this oil along with the volume of make-up solvent added during operations is equal to the solvent emission.

CHAPTER 7

CONTROL OF CARBON MONOXIDE EMISSIONS

7.1 No person shall emit the carbon monoxide gases generated during the operation of a grey iron cupola, blast furnace, or basic oxygen steel furnace unless they are burned at 1,300°F for 0.3 seconds or greater in a direct flame afterburner or equivalent device equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level.

7.2 No person shall emit carbon monoxide waste gas stream from any catalyst regeneration of a petroleum cracking system, petroleum fluid coker, or other petroleum process into the atmosphere, unless the waste stream is burned at 1,300°F for 0.3 seconds or greater in a direct-flame afterburner or boiler equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level.

CHAPTER 8

CONTROL OF NITROGEN OXIDES EMISSIONS

8.1 New Combustion Sources

8.1.1 No person shall cause or permit emissions of nitrogen oxides from a new gas-fired boiler with a capacity of 250 million BTU/hr or more in excess of 0.20 pounds per million BTU of heat input per hour.

8.1.2 No person shall cause or permit emissions of nitrogen oxides from a new oil-fired boiler with a capacity of 250 million BTU/hr or more in excess of 0.30 pounds per million BTU of heat input per hour.

8.1.3 No person shall cause or permit emission of nitrogen oxides from a new coal-fired boiler with a capacity of 250 million BTU per hour or more in excess of 0.7 pounds per million BTU of heat input per hour.

8.1.4 For purposes of this Part, the total heat input from all similar fuel combustion units at a plant or premises shall be used for determining the maximum allowable emission of nitrogen oxides that passes through a stack or stacks.

8.2 Nitric Acid Manufacturing

No person shall cause or permit the emission of nitrogen oxides calculated as nitrogen dioxide, from nitric acid manufacturing plants in excess of 5.5 pounds per ton of 100 percent acid produced.

CLASS I COUNTIES

COUNTY	Justification		% Urban Population (1)	Ambient Air Quality (2)
	Urban Population Exceeded 50%	Secondary Nation Ambient Air Quality Standard is Exceeded		
Autauge	x		53.6	*
Calhoun	x	x	64.1	94
Coffee	x		58.0	*
Colbert	x	x	58.1	130
Covington	x		56.6	46
Cullman		x		87
Dale	x		62.3	*
Etowah	x	x	72.1	142
Houston	x	x	64.9	76
Jackson		x		127
Jefferson	x	x	68.4	170
Lauderdale	x	x	50.0	114
Lee	x		68.2	*
Madison	x	x	78.6	60
Mobile	x	x	82.1	110
Montgomery	x	x	82.8	124
Morgan	x	x	58.7	74
Pike	x	x	56.7	67
Russell	x	x	55.7	70
St. Clair		x		74
Shelby		x		82
Talladega	x	x	53.2	115
Tuscaloosa	x	x	74.0	94
Walker		x		103

(1) % Urban Population As Defined By The U.S. Department of Commerce Census Bureau for 1970.

(2) Air Quality Measured As Micrograms of Suspended Particulates Per Cubic Meter of Ambient Air (ug/m^3) in 1971. (National Ambient Air Quality Secondary standard for particulate is 60 ug/m^3 annual geometric mean)

* No Data

** Three hour maximum values for sulfur dioxide are 0.993 ppm for Jefferson County and 1.10 ppm for Mobile County (National Ambient Air Quality Secondary standard for sulfur oxides is 0.5 ppm as a maximum three-hour concentration not to be exceed more than once a year).

CHAPTER 12

STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

12.1 General

12.1.1 The Environmental Protection Agency Regulations on Standards of Performance for New Stationary Sources (40 CFR, Part 60) designated in Part 12.2 are incorporated by reference as they exist on the date of adoption and promulgation by the Commission into these regulations as amended by the word or phrase substitutions given in Part 12.3. References for specific documents containing the complete text of subject regulations are given in Appendix C.

12.1.2 In the event of any conflict between the regulations contained in this chapter and regulations contained in other chapters, the regulations of Chapter 12 will take precedence for standards of performance for new stationary sources unless the existing regulations are more stringent.

12.1.3 Definitions

For purposes of this chapter, the definitions listed in Section 60.2 Subpart A, Part 60, Title 40 of the Code of Federal Regulations will apply.

12.2 Designated Standards of Performance

12.2.1 Subpart D - Fossil Fuel-Fired Steam Generators (units of more than 63 million kcal per hour heat input).

12.2.2 Subpart E - Incinerators (units of more than 50 tons per day charging rate).

12.2.3 Subpart F - Portland Cement Plants (kiln, clinker cooler, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finish product storage, conveyor transfer points, bagging and bulk loading and unloading systems).

12.2.4 Subpart G - Nitric Acid Plants (nitric acid production units).

12.2.5 Subpart H - Sulfuric Acid Plants (sulfuric acid production units).

12.2.6 Subpart I - Asphalt Concrete Plants (dryers, systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing asphalt concrete; and the loading, transfer and storage systems associated with emission control systems).

12.2.7 Subpart J - Petroleum Refineries (fluid catalytic cracking unit catalyst regenerators, fluid catalytic cracking unit incinerator-waste heat boilers and fuel gas combustion devices).

12.2.8 Subpart K - Storage Vessels for Petroleum Liquids (storage vessels with a capacity greater than 40,000 gallons).

12.2.9 Subpart L - Secondary Lead Smelters (pot furnaces of more than 550 pounds charging capacity, blast (cupola) furnaces and reverberatory furnaces).

12.2.10 Subpart M - Secondary Brass and Bronze Ingot Production Plants (reverberatory and electric furnaces of 2,205 pounds or greater production capacity and blast (cupola) furnaces of 550 pounds per hour or greater production capacity).

12.2.11 Subpart N - Iron and Steel Plants (basic oxygen process furnace).

12.2.12 Subpart O - Sewage Treatment Plants (incinerators which burn the sludge produced by municipal sewage treatment facilities).

12.2.13 Subpart P - Primary Copper Smelters (dryer, roaster, smelting furnace, and copper converter).

12.2.14 Subpart Q - Primary Zinc Smelters (roaster and sintering machine).

12.2.15 Subpart R - Primary Lead Smelters (sintering machine, sintering machine discharge end, blast furnace, dross reverberatory furnace, electric smelting furnace, and converter).

12.2.16 Subpart S - Primary Aluminum Reduction Plants (potroom groups and anode bake plants).

12.2.17 Subpart T - Wet Process Phosphoric Acid Plants (any combination of reactors, filters, evaporators, and hotwells).

12.2.18 Subpart U - Superphosphoric Acid Plants (any combination of evaporators, hotwells, acid sumps, and cooling tanks).

12.2.19 Subpart V - Diammonium Phosphate Plants (any combination of reactors, granulators, dryers, coolers, screens and mills).

12.2.20 Subpart W - Triple Superphosphate Plants - (any combination of mixers, curing belts (dens), reactors, granulators, dryers, cookers, screens, mills, and facilities which store run-of-pile triple superphosphate).

12.2.21 Subpart X - Granular Triple Superphosphate Storage Facilities -

(any combination of storage or curing piles, conveyors, elevators, screens, and mills).

12.2.22 Subpart Y - Coal Preparation Plants (units which process more than 200 tons per day: thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems).

12.2.23 Reserved

12.2.24 Subpart AA - Steel Plants (Electric arc furnaces and dust-handling equipment).

12.3 Word or Phrase Substitutions

In all the standards designated in Part 12.2 substitute:

12.3.1 Director for Administrator

12.3.2 Commission for U. S. Environmental Protection Agency (except in references).

CHAPTER 14

CONTINUOUS MONITORING
REQUIREMENTS FOR EXISTING SOURCES

14.1 Definitions

14.1.1 For the purposes of this Chapter, the following terms will have the meanings ascribed in this part:

(a) "Emission standard" means a regulation (or portion thereof) setting forth an allowable rate of emissions, level of opacity, or prescribing equipment or fuel specifications that result in control of air pollution emissions.

(b) "Capacity factor" means the ratio of the average load on a machine or equipment for the period of time considered to be the capacity rating of the machine or equipment.

(c) "Excess emissions" means emissions of an air pollutant in excess of an emission standard.

(d) "Sulfuric acid plant" means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge, but does not include facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

(e) "Fossil fuel-fired steam generator" means a furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

14.2 Emission Monitoring and Reporting Requirements

14.2.1 Sources in the following categories which initiated construction prior to August 17, 1971, are subject to the requirements of this Chapter:

(a) Fossil fuel-fired steam generators

(b) Sulfuric acid plants

Sources in these categories which are constructed after August 17, 1971, are subject to the emission monitoring requirements of Chapter 12. This Chapter is intended to supplement existing regulations, and no part thereof shall be construed to interfere with the enforcement of other provisions of the Alabama Air Pollution Control Rules and Regulations.

14.2.2 The Director shall require the owner or operator of an emission source listed in Section 14.2.1 to install, calibrate, operate, and maintain all monitoring equipment necessary for continuously monitoring the pollutants specified in Sections 14.2.3 and 14.2.4. The specific source categories listed in Section 14.2.1 must complete the installation and performance testing of monitoring equipment and begin monitoring and recording within eighteen months from the date of the Environmental Protection Agency's approval of these regulations. Within 6 months of such approval, all affected sources must present a detailed plan for complying with the requirements of this Chapter to the Director. The Director shall condition written approval of such plan upon the requirement that the plan will meet the minimum reporting requirements set forth in Divisions 4 and 5 of Appendix P of 40 CFR 51. More stringent reporting procedures may be required in the Director's discretion.

14.2.3 Fossil fuel-fired steam generators, as defined in this Chapter, with an annual average capacity factor of greater than thirty percent, as reported to the Federal Power Commission for calendar year 1974, or as otherwise demonstrated to the Director by the owner or operator, shall conform with the following monitoring requirements when such facility is subject to an emission standard for the pollutant in question:

(a) A continuous monitoring system for the measurement of opacity shall be installed, calibrated, maintained, and operated by the owner or operator of any such steam generator of greater than 250 million BTU per hour heat input except where:

(1) gaseous fuel is the only fuel burned, or

(2) oil or a mixture of gas and oil are the only fuels burned and the source is able to comply with the applicable particulate matter collection equipment, and where the source has never been found, through any administrative or judicial proceedings, to be in violation of any visible emission standard of the applicable plan.

(b) A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated on any fossil fuel-fired steam generator of greater than 250 million BTU per hour heat input which has installed equipment designed for the desulfurization of flue gas.

(c) A continuous monitoring system for the measurement of the percent oxygen or carbon dioxide in stack gases shall be installed, calibrated, operated, and maintained on fossil fuel-fired steam generators where measurements of oxygen or carbon dioxide in the flue gas are required to convert sulfur dioxide continuous emission monitoring data, to units of the emission standard in Chapter 5.

-70-A 99

14.2.4 Sulfuric acid plants, as defined in this Chapter, with greater than 300 tons per day production capacity, the production being expressed as 100 percent acid, shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of sulfur dioxide for each sulfuric acid producing facility within such plant.

14.2.5 All monitoring equipment specified in this Chapter shall meet the performance specifications described in Appendix B of 40 CFR 60, except that the Director may from time to time specify different data averaging times and sampling intervals to permit accurate determinations of compliance with specific Air Pollution Control Rules and Regulations.

The monitoring equipment shall also be installed, calibrated, operated, and maintained in accordance with the procedures in Appendix B of 40 CFR 60 and the minimum specifications of Division 3 in Appendix P of 40 CFR 51.

14.3 Monitoring System Malfunction

14.3.1 Malfunctions of a monitoring system required in this Chapter which last more than 48 hours must be reported as expeditiously as possible to the Director in a written report. This report should include statements as to the time the monitor malfunctioned, the nature of the malfunction, the corrective action being taken, the estimated repair time, and any other information needed to demonstrate to the Director that the malfunction was unavoidable. The Director shall be informed of the time at which the monitor again becomes operational.

14.3.2 The Director may temporarily exempt an owner or operator from the monitoring and reporting requirements of this Chapter if it is demonstrated to the Director's satisfaction that the malfunction was unavoidable and is being repaired as expeditiously as possible.

14.4 Alternate Monitoring and Reporting Requirements

14.4.1 Alternative monitoring and reporting requirements may be approved by the Director on a case-by-case basis, provided the following statements and explanations are contained in a written request to the Director:

(a) the basis or reason that alternative monitoring and reporting requirements are desirable and necessary;

(b) a proposal of alternative monitoring and reporting requirements;

(c) any other information needed by the Director to make a determination of the desirability of alternative requirements.

14.4.2 Request for alternative monitoring and reporting requirements may be made in certain situations, including, but not limited to, the following:

(a) when installation of a continuous monitoring system or device required by this Chapter would not provide accurate determinations of emissions;

(b) when the affected facility is operated less than 30 days per year;

(c) when effluents from two or more sources of significantly different design and operating characteristics are combined before release to the atmosphere or when the effluent from one source is released to the atmosphere through more than one point;

(d) when the Director determines that the requirements prescribed by this Chapter would impose an extreme economic burden on the source owner or operator. The determination of an extreme economic burden shall be made on the basis of whether meeting the requirements prescribed by this Chapter would produce serious hardship without equal or greater benefit to the public;

(e) when the monitoring systems prescribed by this Chapter cannot be installed due to physical limitations at the facility. The determination of such limitations shall be made on the basis of whether meeting the requirements prescribed by this Chapter would necessitate significant reconstruction of the facility.

14.4.3 The Director may require the submission of additional information as he deems appropriate to evaluate the request for alternative requirements. Upon making a determination that the source should be subject to alternative monitoring and reporting requirements, the Director may approve either the proposed alternative monitoring and reporting requirements or any other monitoring and reporting requirements that he deems appropriate and feasible.

14.5 Exemptions and Extensions

14.5.1 The Director may exempt any source from the requirements of this Chapter if such source is scheduled for permanent shut down by October 6, 1980, provided that adequate evidence and guarantees are provided to clearly show that the source will cease operations prior to such date.

14.5.2 The Director may grant reasonable extensions of the time provided for installation of monitors for facilities unable to meet the prescribed

18-month time frame, provided that the owner or operator of such facility demonstrates that good faith efforts have been made to obtain and install such devices within the prescribed timeframe.

14.5.3 If, prior to September 11, 1974, an affected source purchased an emission monitor which does not conform to the requirements of Appendix B of 40 CFR 60, then the source may be granted a five-year period from the date of the Environmental Protection Agency's approval of this revision, during which time the monitor installed on that source is exempt from applicable performance specifications.

Chapter 16 - Permits

The requirements contained in Section 16.1.1 through Section 16.3.1 are a reorganization of existing regulations presently contained in Part 1.12 of the Alabama Air Pollution Control Commission Rules and Regulations.

16.3.2 Permits to Construct in or Near Nonattainment Areas.

(a) Effective Date. The requirements of this Section shall be effective upon approval by EPA.

(b) Definitions. For purposes of this Section, the following terms will have the meanings ascribed in this Paragraph:

(1) "Source" means an identifiable piece of process equipment. A facility is composed of one or more pollutant-emitting sources.

(2) "Potential" to emit means the maximum capacity to emit a pollutant absent air pollution control equipment. "Air pollution control equipment" includes control equipment which is not, aside from air pollution control laws and regulations, vital to production of the normal product of the source or to its normal operation. Annual potential shall be based on the maximum annual rated capacity of the source, unless the source is subject to enforceable permit conditions which limit the operating rate or hours of operation, or both. Enforceable permit conditions on the type or amount of materials combusted or processed may be used in determining the potential emission rate of a source.

(3) "Major facility" means any source or sources for which the potential emission rate is equal to or greater than 100 tons per year of any of the following pollutants: particulate matter, sulfur oxides, nitrogen oxides, volatile organic compounds, or carbon monoxide.

(4) "Major modification" means any physical change in, change in the method of operation of, or addition to a facility which increases the potential emission rate of any air pollutant specified in Subparagraph 16.3.2(b)(3) above (including any not previously emitted and taking into account all accumulated increases in potential emissions occurring at the facility since February 16, 1979, or since the time of the last construction approval issued for the facility pursuant to this Section, whichever time is more recent, and regardless of any emission reductions achieved elsewhere in the facility) by 100 tons per year or more.

(i) A physical change shall not include routine maintenance, repair and replacement.

(ii) A change in the method of operation, unless limited by previous permit conditions, shall not include:

(A) An increase in the production rate, if such increase does not exceed the operating design capacity of the source;

(B) An increase in the hours of operation;

(C) Use of an alternative fuel or raw material, if on December 21, 1976, the source was capable of accomodating such fuel or material; or

(D) Use of an alternative fuel or raw material by reason of an order in effect under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act.

(E) Use of an alternative fuel by reason of an order or rule under Section 125 of the Clean Air Act.

(F) Change in ownership of a source.

(G) Use of refuse derived fuel generated from municipal solid waste.

(5) "Allowable emissions" means the emission rate calculated using the maximum rated capacity of the source (unless the source is subject to enforceable permit conditions which limit operating rate, or hours of operation, or both) and the most stringent of the following:

(i) Applicable new source performance standards set forth in 40 CFR Part 60,

(ii) Applicable national emission standard for hazardous air pollutant set forth in 40 CFR Part 61,

(iii) Applicable State Implementation Plan emission limitation; or

(iv) The emission rate specified as an enforceable permit condition.

(6) "Lowest achievable emission rate" (LAER) means, for any source, that rate of emissions based on the following, whichever is more stringent:

(i) The most stringent emission limitation which is contained in the implementation plan of any State for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable.

(ii) The most stringent emission limitation which is achieved in practice or can reasonably be expected to occur in practice by such class or category of sources taking into consideration the pollutant which must be controlled.

(iii) This term, applied to a modification, means the lowest achievable emission rate for the new or modified source within the facility. In no event shall the application of this term permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance.

(7) (i) "Reconstruction" will be presumed to have taken place where the fixed capital cost of the new components exceed 50 percent of the fixed capital cost of a comparable entirely new facility or source. However, any final decision as to whether reconstruction has occurred shall be made in accordance with the provisions of 40 CFR Section 60.15(f)(1)(3). A reconstructed source will be treated as a new source for purposes of this Section, except that use of an alternative fuel or raw materials by reason of an order in effect under Section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), by reason of natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of an order or rule under Section 125 of the Act, shall not be considered reconstruction.

(ii) In determining LAER for reconstructed sources, the provisions of 40 CFR Section 60.15(f) (4) shall be taken into account in assessing whether a new source performance standard is applicable to such source.

(8) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(9) "Significant Impact" means:

(i) For particulate matter and sulfur dioxide, the following significant levels would be exceeded in the portion of the designated nonattainment area where the ambient air quality standards are actually violated.

	Annual	24-Hour	3-Hour
Particulate Matter	1 ug/m**3	5 ug/m**3	
Sulfur Dioxide	1 ug/m**3	5 ug/m**3	25 ug/m**3

(ii) For volatile organic compounds, any source locating outside the boundaries of a nonattainment area shall not be considered to have a significant impact on the nonattainment area.

(c) Applicability:

Except as provided in Paragraphs (d), (e), and (f) below, no Permit to Construct shall be issued to a person proposing to construct or make a major modification to a major facility (for the pollutant for which the area has been designated nonattainment) in a nonattainment area or which will have a significant impact if located outside the nonattainment area unless:

(1) The person demonstrates that the new source or the major modification will meet an emission limitation, said emission limitation to be the lowest achievable emission rate (LAER) for that source or facility.

(2) The person certifies that all existing major sources owned or operated by that person (or any entity controlling, controlled by, or under common control with that person) in the State are in compliance with applicable emission limits or are on an acceptable schedule.

(3) The person demonstrates that emission reductions from existing source(s) in the area of the proposed source or major modification (whether or not under the same ownership) meet the offset requirements of Section 16.3.2(g).

(4) Emissions from approved minor source growth not previously offset in accordance with the provisions of this Part, shall be offset by persons proposing to construct or make a major modification to a major source located in a nonattainment area.

(d) Exceptions:

(1) (i) The requirements of Paragraph 16.3.2(c) shall not apply with respect to a particular pollutant, if the person applying for a Permit to Construct under this Section can demonstrate that the increase in allowable emissions of that pollutant from the new source (or sources) or major modification would be less than 50 tons per year, 1,000 pounds per day or 100 pounds per hour, whichever is more restrictive. The preceding hourly and daily rates shall apply only with respect to a pollutant for which a national ambient air quality standard, for a period of less than 24 hours or for a 24-hour period, as appropriate, has been established.

(ii) (A) Provided however, where a facility is constructed or modified in increments which individually do not emit more than the limitations specified in (1)(i) above and the increments have not been offset in accordance with this Section, the allowable emissions from all such increments granted a permit to construct after December 21, 1976, shall be added together and this Section may be applicable when a proposed increment would cause the sum of the allowable emissions which have not been offset to equal or exceed 50 tons per year, 1,000 pounds per day, or 100 pounds per hour.

(B) Where a facility is constructed or modified in increments so as to become subject to the requirements of this Part, the provisions of Paragraph (c) are applicable to all increments. However, the applicability of LAER to increments which have previously obtained approval shall take into account the stage of construction of such increment and the ability of the source to install additional control equipment.

(2) In determining whether and to what extent a major modification would increase allowable emissions, emission reductions achieved elsewhere at the facility at which the modification would occur shall not be taken into account.

(3) (i) A person proposing to construct or make a major modification to a major facility subject to the provisions of this Section, located in a nonurban nonattainment area (less than 200,000 population), shall be required to install LAER but shall not be required to obtain emission offsets as specified herein.

(ii) The provisions of Paragraph (3)(i) are applicable to volatile organic compound sources only.

(4) Construction of or modification to a major source locating in a nonattainment area which is projected to be attainment as of the startup date of such source, shall be exempt from the requirements of this Section.

(e) Temporary Emissions. The requirements of Subparagraphs (c)(3) and (4) shall not apply to emissions of a particular pollutant if the person applying for a Permit to Construct under this Section can demonstrate that the emissions of the pollutant are of a temporary nature including but not limited to those from a pilot plant, a portable facility, construction, or exploration and notice is given to the Director at least thirty (30) days prior to relocation of such source identifying the proposed new location and the probable duration of operation at such location.

(f) Minor Sources. The requirements of Paragraph (c) shall not apply to minor sources located in a nonattainment area; minor sources so located shall be required to meet an emission limitation which specifies Best Available Control Technology (BACT).

(g) Offset standards:

(1) Increased emissions by a source subject to this Section

must be off-set by reduction in the emissions of that pollutant by the source itself or by other sources in the allowable offset area to the extent necessary to prevent interference with reasonable further progress toward attainment.

(2) When an major source or modification, which is otherwise subject to the requirements of this Paragraph, will result in a specific and well defined increase in secondary emissions, which can be accurately quantified and which will impact the same nonattainment area, these emissions shall be offset in accordance with the requirements of this Paragraph.

(3) The baseline for determining credit for emission offsets of any source shall be the allowable emissions of said source or the existing emissions of said source, not including any malfunctions, whichever is less.

(4) Reduced allowable emissions from an existing source due to a change to a cleaner fuel may be used to offset emissions from the new source or alteration so long as the change will occur at some future date. Emission reductions from a change of fuel shall not be used to offset emissions if there are not adequate supplies of the new fuel available.

(5) Offsets shall be made on a tons-per-year basis when all facilities involved in the emission offset calculations are operating at their maximum expected production rate. However, a source may be credited with emission reductions achieved by the shutdown of a source or the curtailment of production of a source below that which existed at the time the application was submitted, provided that the work force to be affected has been notified of the proposed shutdown or curtailment.

(6) All emission reductions used for offsets must be legally enforceable in a manner approved by the Director.

(h) Offset Area Defined: The allowable offset area for all pollutants shall be the nonattainment area within which the new source or modification is located.

(i) Banking of Emission Offsets:

For offsets approved after January 16, 1979, those offsets which exceed the requirement of reasonable further progress may be "banked" for future use; likewise, the owner of an existing source that reduces its own emissions may "bank" those reductions which exceed the requirement of reasonable further progress. The banking is subject to the following requirements:

(1) (i) Application shall be made in writing to the Director, describing the emission offsets to be banked, such

description to include location, source and type of emissions.

(ii) Emission offsets cannot be banked beyond the allowable emissions of said source or the existing emissions of said source, not including any malfunctions, whichever is less.

(2) Upon approval by the Director of said application, the banked emissions shall be credited to the facility submitting such application.

(3) (i) No emission offsets banked in accordance with the provisions of this Paragraph shall be used unless written notice is provided to the Director thirty (30) days prior to submission of the necessary permit applications, to provide opportunity for review of the proposed use of the banked emission offsets.

(ii) In the event that a determination is made that the banked emission offsets may not be used for the proposed construction, written notice shall be afforded the applicant, as provided in Section 16.2.3, herein.

(4) In the event that a determination under Subsection (i) (3) (ii) above is made by the Director, construction may proceed if, and only if, emission offsets are obtained sufficient to satisfy the requirements of Paragraph 16.3.2(g).

(5) Nothing contained in this Paragraph shall prohibit the transfer, assignment, sale or otherwise complete disposition of said banked emission offsets, provided that written notice is provided to the Director, thirty (30) days prior to such disposition, describing in detail the recipient of the banked emissions.

(j) Bubble. Notwithstanding the requirements of Paragraph 16.3.2 (c), sources modified within existing facilities may be granted a Permit to Construct if the person demonstrates that intra-source emission reductions sufficient to meet the relevant requirements of Section 16.3.2(g) will be achieved.